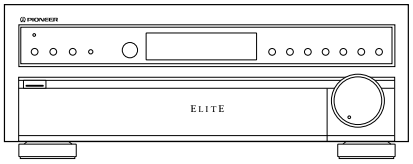
Operating Instructions

AUDIO/VIDEO MULTI-CHANNEL RECEIVER

VSX-11



PIONEER®
The Art of Entertainment

Thank you for buying this Pioneer product.
Please read through these operating instructions so you will know how to operate your model properly. After you have finished reading the instructions, put them away in a safe place for future reference.
In some countries or regions, the shape of the power plug and power outlet may sometimes differ from that shown in the explanatory drawings. However the method of connecting and operating the unit is the same.

WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

THE POWER SWITCH IS SECONDARY CONNECTED AND THEREFORE DOES NOT SEPARATE THE UNIT FROM MAINS POWER IN STANDBY POSITION.

IMPORTANT NOTICE

The serial number for this equipment is located on the rear panel. Please write this serial number on your enclosed warranty card and keep it in a secure area. This is for your security.

IMPORTANT

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

CAUTION:
TO PREVENT THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Cet appareil numérique de la Classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

Manufactured under license from the Dolby Laboratories Licensing Corporation. DOLBY, the double-D symbol DD and "PRO LOGIC" are trademarks of Dolby Laboratories Licensing Corporation.

The words "TRUSURROUND", "SRS", "Sound Retrieval System" and SRS symbol (●) are trademarks of SRS Labs, Inc. Made under license from SRS Labs, Inc. Patented in the USA and selected countries. Purchase of this product does not convey the right to sell recordings made with the Sound Retrieval System.

IMPORTANT SAFETY INSTRUCTIONS

READ INSTRUCTIONS — All the safety and operating instructions should be read before the product is operated.

RETAIN INSTRUCTIONS — The safety and operating instructions should be retained for future reference.

HEED WARNINGS — All warnings on the product and in the operating instructions should be adhered to.

FOLLOW INSTRUCTIONS — All operating and use instructions should be followed.

CLEANING — Unplug this product from the wall outlet before cleaning. The product should be cleaned only with a polishing cloth or a soft dry cloth. Never clean with furniture wax, benzine, insecticides or other volatile liquids since they may corrode the cabinet.

ATTACHMENTS — Do not use attachments not recommended by the product manufacturer as they may cause hazards.

WATER AND MOISTURE — Do not use this product near water — for example, near a bathtub, wash bowl, kitchen sink, or laundry tub; in a wet basement; or near a swimming pool; and the like.

ACCESSORIES — Do not place this product on an unstable cart, stand, tripod, bracket, or table. The product may fall, causing serious injury to a child or adult, and serious damage to the product. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer, or sold with the product. Any mounting of the product should follow the manufacturer's instructions, and should use a mounting accessory recommended by the manufacturer.

CART — A product and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the product and cart combination to overturn.

VENTILATION — Slots and openings in the cabinet are provided for ventilation and to ensure reliable operation of the product and to protect it from overheating, and these openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface. This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.

POWER SOURCES — This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your product dealer or local power company.

LOCATION – The appliance should be installed in a stable location.

NONUSE PERIODS – The power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.

GROUNDING OR POLARIZATION

- If this product is equipped with a polarized alternating current line plug (a plug having one blade wider than the other), it will fit into the outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.
- If this product is equipped with a three-wire grounding type plug, a plug having a third (grounding) pin, it will only fit into a grounding type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the grounding type plug.

POWER-CORD PROTECTION — Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the product.

OUTDOOR ANTENNA GROUNDING — If an outside antenna or cable system is connected to the product, be sure the antenna or cable system is grounded so as to provide some protection against voltage surges and built-up static charges. Article 810 of the National Electrical Code, ANSI/NFPA 70, provides information with regard to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna-discharge unit, connection to grounding electrodes, and requirements for the grounding electrode. See Figure A.

LIGHTNING — For added protection for this product during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the product due to lightning and power-line surges.

POWER LINES — An outside antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can fall into such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits as contact with them might be fatal.

OVERLOADING — Do not overload wall outlets, extension cords, or integral convenience receptacles as this can result in a risk of fire or electric shock.

OBJECT AND LIQUID ENTRY — Never push objects of any kind into this product through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.

SERVICING — Do not attempt to service this product yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

DAMAGE REQUIRING SERVICE — Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:

- When the power-supply cord or plug is damaged.
- If liquid has been spilled, or objects have fallen into the product.
- If the product has been exposed to rain or water.
- If the product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to its normal operation.
- If the product has been dropped or damaged in any way.
- When the product exhibits a distinct change in performance — this indicates a need for service.

REPLACEMENT PARTS — When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.

SAFETY CHECK — Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.

WALL OR CEILING MOUNTING — The product should not be mounted to a wall or ceiling.

HEAT — The product should be situated away from heat sources such as radiators, heat registers, stoves, or other products (including amplifiers) that produce heat.

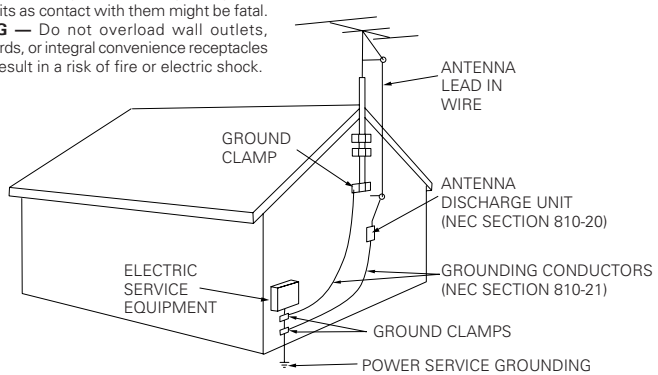


Fig. A

NEC — NATIONAL ELECTRICAL CODE

Information to User

Alteration or modifications carried out without appropriate authorization may invalidate the user's right to operate the equipment.

FEATURES

□ DOLBY PRO LOGIC COMPATIBLE

Best suited for playing back movies and music by reproducing surround effects.

□ 100 W 5 ch EQUAL POWER DISCRETE AMPLIFIER

5-channel equal power discrete amplifier enables playback of the high quality Dolby Pro Logic surround effects.

□ VARIOUS SURROUND EFFECTS (DSP)

Reproduces six different surround effects.

□ VIRTUAL DOLBY SURROUND

The Virtual Dolby surround function employs TruSurround* technology to create a three-dimensional sound field using only the front right and left speakers.

* Registered in the US and selected foreign countries.

□ 5.1-CHANNEL INPUT

Features input terminals for center, surround L, R, and sub-woofer (LFE) channels, thus allowing the connection of Dolby Digital decoder or DVD player provided with 5.1-channel output.

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□ CONTROL OF OTHER MANUFACTURERS' EQUIPMENT USING THE MULTI CONTROL (UNIVERSAL) REMOTE CONTROL UNIT

Can be used to operate other manufacturers' products with the multi control remote control unit by presetting and learning functions.

□ DIGITAL NOISE REDUCTION (DNR)

Signals are digitally filtered into multiple frequency bands, and noise is eliminated by expanding the difference between the music signal and the noise. This function can be used only during 2-channel operation.

□ 5-D THEATER

The 5-D THEATER function provides clear dynamic sound effects by outputting audio signals through the rear channel to simulate stereo sound.

4. VARIOUS OPERATIONS

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* Registered in the US and selected foreign countries.

5. OTHER

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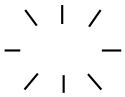
READING THIS MANUAL

■Meaning of Marks

Provides detailed precautions and advice on operations, etc.

Indicates that buttons or displays are blinking.



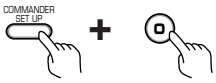
Indicates that buttons or displays are lit.

Indicates that display changes automatically.

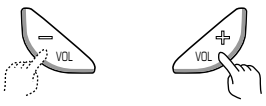
Indicates that displays alternate.

■Meaning of Illustrations

Means to press the ENTER button (of the remote control unit).



Means to press the 0 button (of the remote control unit) while pressing the COMMANDER SET UP button (of the remote control unit).

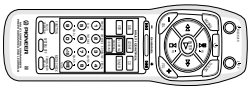


Means to press the VOL – or VOL + button (of the remote control unit).

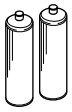
CHECKING ACCESSORIES

FM antenna

AM loop antenna



Remote control unit



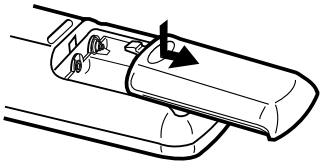
Alkaline dry cell batteries (size "AA" IEC LR6) x 2

Operating instructions

REMOTE CONTROL UNIT

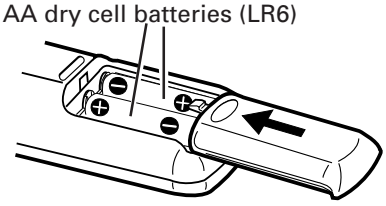
Loading remote control batteries

1.



2.

AA dry cell batteries (LR6)

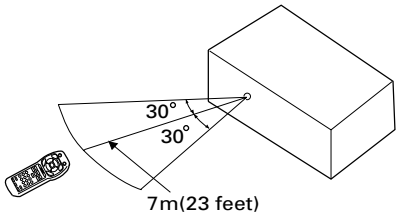


⚠CAUTIONS

Incorrect use of batteries may result in such hazards as leakage and bursting. Observe the following precautions.

- Never use new and old batteries together.
- Insert the plus and minus sides of the batteries properly according to the marks in the battery compartment.
- Batteries with the same shape may have different voltages. Do not use different batteries together.

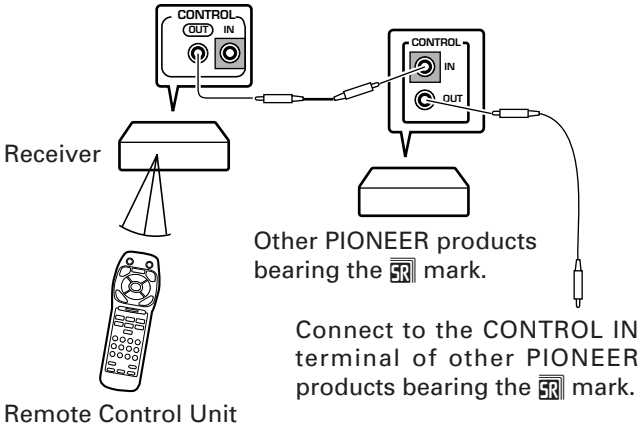
Operating range of remote control unit



Memo

- The remote control unit may not work if there is an obstacle between the remote control unit and this unit, or if the remote control unit is not directed towards the remote sensor of the main unit at the correct angle.
- The remote control unit may not work properly if strong light such as direct sunlight or fluorescent light is shining onto the main unit's remote sensor.
- The remote control unit may not work properly when this unit is used near devices emitting infrared rays, or when remote control units of other devices which use infrared rays are used.
  On the other hand, the use of this remote control unit may cause other devices to work improperly.
- When the operating range of this remote control unit becomes too short, replace the batteries.

System remote control

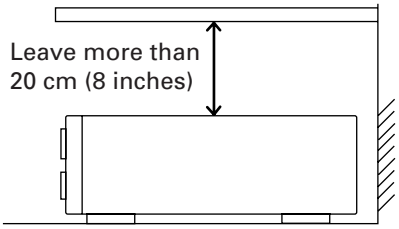


By connecting a control cord (optional), other PIONEER products can be operated using this remote control unit. Point the remote control unit towards the remote sensor of this unit and operate.
The remote control signals are received by the remote sensor of this unit, and sent to the other devices via the CONTROL OUT terminal. By reading other manufacturers' preset codes or memorizing (learning) the remote control signals of other equipment in this remote control unit, other manufacturers' equipment can also be operated using this remote control unit.
When a control cord is connected to the receiver's CONTROL IN terminal, direct control of the receiver with the remote control unit is not possible. Operate the receiver with the remote control unit by aiming it at the connected equipment's remote sensor.

INSTALLATION

Installing this unit

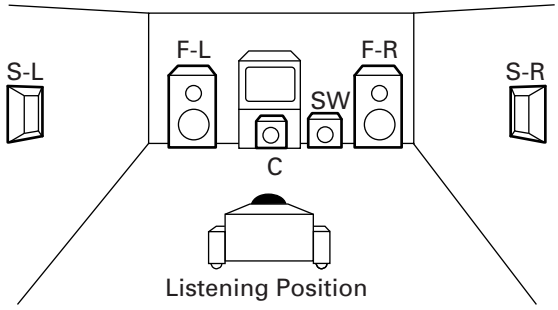
- Do not place objects on top of this unit so that radiated heat can be properly dispersed.
- When installing in racks, etc., leave more than 20 cm of space at the top.



Installing speakers

To achieve the best surround effects, install speakers as shown in the following figure.

Installation Example



* In the above figure, F stands for front speakers, S for surround speakers, C for center speaker, SW for sub woofer, R for right, and L for left.

Memo

- If installing the surround speakers far away from the front and center speakers, surround effects cannot be fully achieved.
- Installing speakers near the TV may cause interference such as the TV color to change. In such cases, use magnetically shielded speakers or install the speakers away from the TV.
- Install the left and right speakers at equal distance from the TV.
- Install the center speaker at the top, bottom, or behind the TV so that TV sound and images match.
- It is recommended to install the surround speakers slightly above ear level.

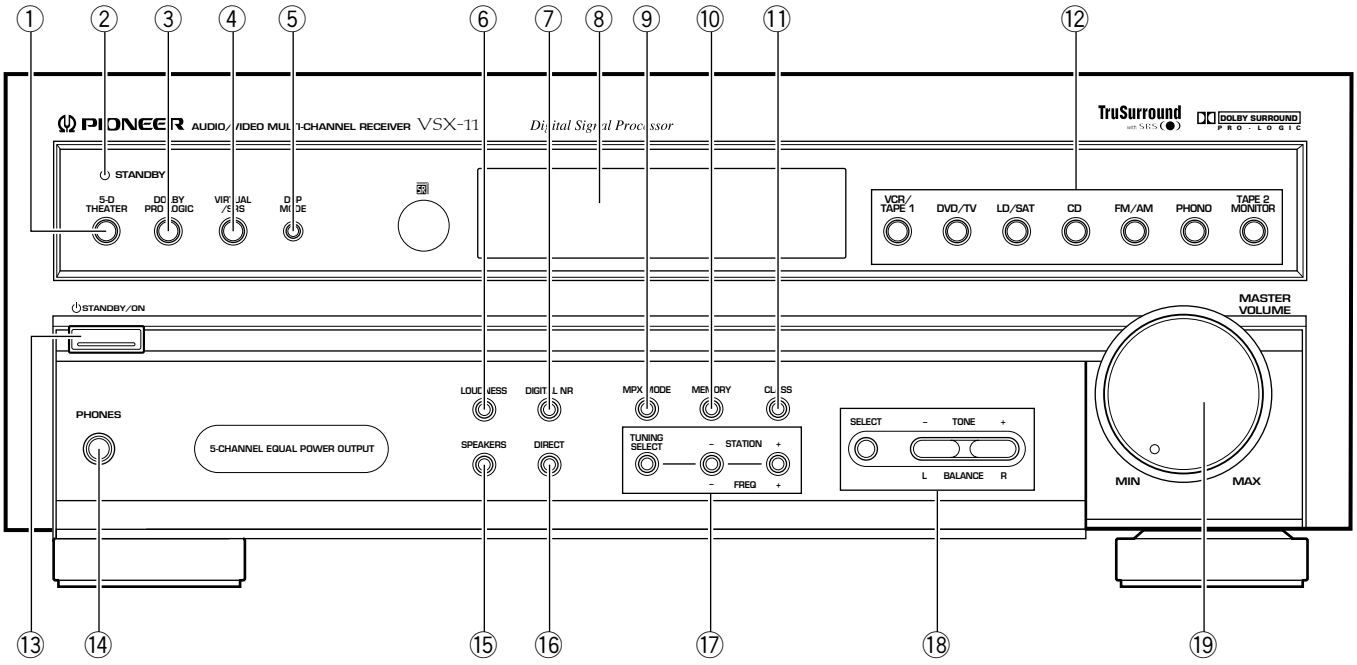
Installing a cassette deck

Noises may be produced during playback according to the place the cassette deck is installed.
The noises are caused by the effects of leakage flux of the transformer of the receiver.
In such cases, change the place of installation or install away from the receiver.

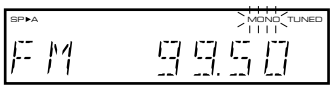
NAMES OF PARTS

Front panel

- The size of characters shown in the figure may differ from that on the actual product.
- The following is an illustration as the door is opened.

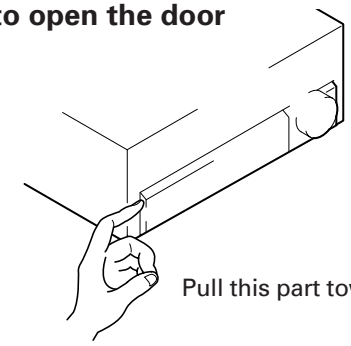


① **5-D THEATER button (P.33)**
② **STANDBY indicator**
③ **DOLBY PRO LOGIC button (P.28)**
④ **VIRTUAL/SRS button (P.34)**
⑤ **DSP MODE button (P.31)**
⑥ **LOUDNESS button**
Press this button when the volume is low to raise the low and high range levels so that the sound can be heard more easily.
⑦ **DIGITAL NR button (P.17)**
⑧ **Display**
⑨ **MPX MODE button**
Use to switch the auto stereo/monaural mode for receiving FM broadcasts. When the received broadcast signal is weak, press this button to set the monaural mode.

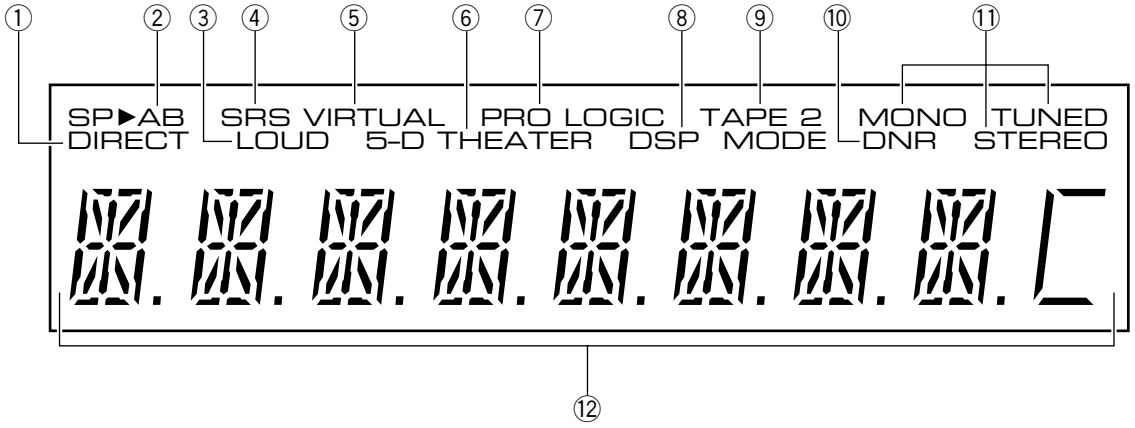


⑩ **MEMORY button (P.20)**
⑪ **CLASS button (P.20)**
⑫ **Function buttons (P.16)**
⑬ **Power STANDBY/ON button**
⑭ **PHONES jack (Headphones terminal)**
⑮ **SPEAKERS button (P.17)**
ON/OFF switches for the A and B speaker systems.
⑯ **DIRECT button**
Use to play back sound without going through the tone and balance control circuits. DOLBY PRO LOGIC, DSP MODE, 5-D THEATER, DOLBY VIRTUAL/SRS, DIGITAL NR and LOUDNESS also turn off.
⑰ **STATION/FREQUENCY buttons (P.19)**
Use to select the frequency and station number when operating the tuner.
⑱ **TONE/BALANCE buttons (P.17)**
Use to adjust tone and balance.
⑲ **MASTER VOLUME**

How to open the door



Display



① **DIRECT indicator**
Lights when DIRECT is ON.

② **SP (Speakers) A, B indicator**
The indicator of the speaker system (A, B) selected will light.

③ **LOUD (Loudness) indicator**
Lights when LOUDNESS is ON.

④ **SRS indicator**
Lights when SRS 1 or SRS 2 (one of the virtual surround mode) is selected.

⑤ **VIRTUAL indicator**
Lights when DOLBY VIRTUAL is selected.

⑥ **5-D THEATER indicator**
Lights in the 5-D THEATER mode.

⑦ **PRO LOGIC indicator**
Lights when Dolby Pro Logic is selected.

⑧ **DSP indicator**
Lights when DSP MODE is selected.

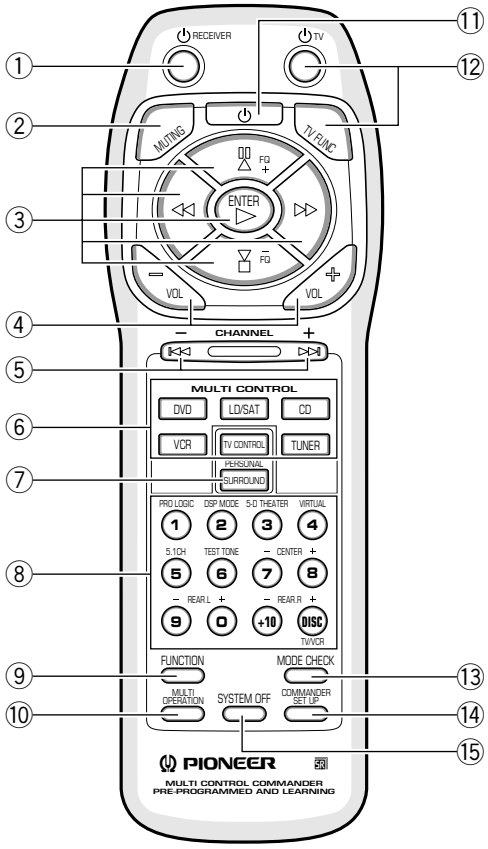
⑨ **TAPE 2 indicator**
Lights when TAPE 2 MONITOR is ON.

⑩ **DNR indicator**
Lights when DIGITAL NR is ON.

⑪ **TUNER indicator**
MONO:
Lights when the monaural mode is set using the MPX MODE button.
TUNED:
Lights when broadcasts are being received.
STEREO:
Lights when stereo broadcasts are received during auto stereo mode.

⑫ **CHARACTER display**

Remote control unit



① **⏻ RECEIVER power button**

② **MUTING button**
Press to mute the volume.

③ **[When set to SURROUND (OPERATIONS)]**
△,▽,◁,▷ (Select/Adjust) and ENTER buttons
[When set to other than SURROUND (OPERATIONS)]
⏸(Pause), □ (Stop), ◁◁(Rewind), ▷▷(Fast Forward), ▷ (Play) buttons
[TUNER Operations]
△,▽ (Frequency+/–), ▷ (FM/AM) buttons

④ **VOL (–, +) buttons**
[TV Operations]
Use to adjust the TV volume.
[When set to other than TV operations]
Use to adjust the receiver volume.

⑤ **[TV Operations]**
Selects the TV broadcast channel.
[CD, LD, DVD Operations]
⏮, ⏭ (Chapter/Track Search) buttons
[TUNER Operations]
Select the memorized station.

⑥ **MULTI CONTROL function buttons**
Used to set and operate MULTI CONTROL, and switch the function.
TV CONTROL: Press to operate the TV.

⑦ **SURROUND/PERSONAL button**
[When setting MULTI operations]
PERSONAL: Press when setting the personal mode using multi operations (P.42).
[When setting to other than MULTI operations]
SURROUND: Press when performing surround operations (P.28 – P.35).

⑧ **Number/surround setting buttons**
[When setting surround (operations)]
PRO LOGIC: Turns Dolby Pro Logic ON/OFF.
DSP MODE: Switches the surround effects.
5-D THEATER: When turned ON, the rear channel sound becomes stereo-like (deep and clear).
VIRTUAL: Switches the virtual surround effects.
5.1 CH: Use to set the DVD 5.1-channel input mode (DVD/TV function only).
TEST TONE: When turned ON (while in Dolby Pro Logic or DVD 5.1-channel input mode), volume balance adjustment signals are output in order from the speakers and can be adjusted.
CENTER –, +: Adjusts the center level.
REAR.L –, +: Adjusts the rear left level.
REAR.R –, +: Adjusts the rear right level.
[Tuner Operations]
Number buttons: Use for setting the frequency value when station call is selected or during direct access.
+10: Switches the CLASS (A/B/C).
DISC: Use to set the DIRECT ACCESS mode.
[VCR Operations]
TV/VCR: Switches between TV/VCR.
[CD Operations]
DISC: Use to select the DISC number.

⑨ **FUNCTION button**
Switches the function.

⑩ **MULTI OPERATION button (P.40 – P.42)**
Use to operate MULTI operations.

⑪ **⏻ (Power) button**
Turns ON/OFF the power of devices other than this unit.

⑫ **TV buttons (P.27)**

⑬ **MODE CHECK button (P.27)**

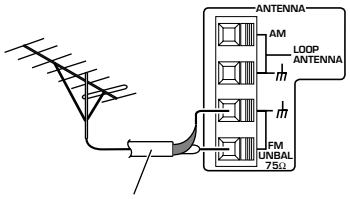
⑭ **COMMANDER SET UP button (P.36 – P.43)**
Use to control and learn operations of other manufacturers' equipment, and set multi operation functions.

⑮ **SYSTEM OFF button (P.43)**
Use to turn OFF the power of all equipment connected to the main unit.

CONNECTING DEVICES

When connecting or changing equipment, be sure to turn OFF the POWER switch, and disconnect the power cord from the wall outlet.

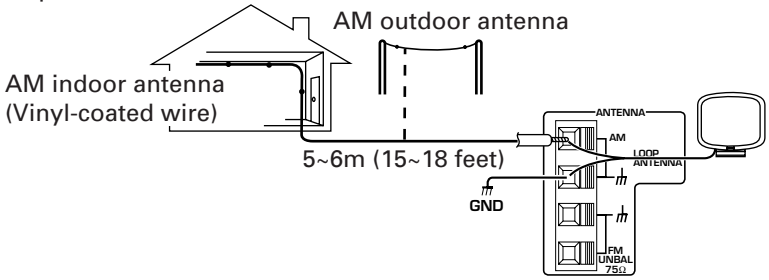
■ For better reception of signals, use an FM external antenna.



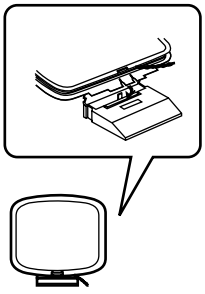
75 Ω coaxial cable

■ When AM broadcast reception is poor

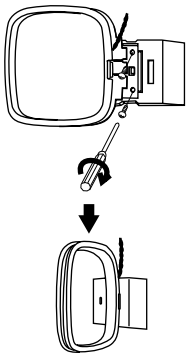
Connect a 5 to 6 meter (15~18 feet) long vinyl-coated wire to the AM antenna terminal. If possible, draw horizontally outdoors to achieve better reception.



■ Assembling the AM loop antenna

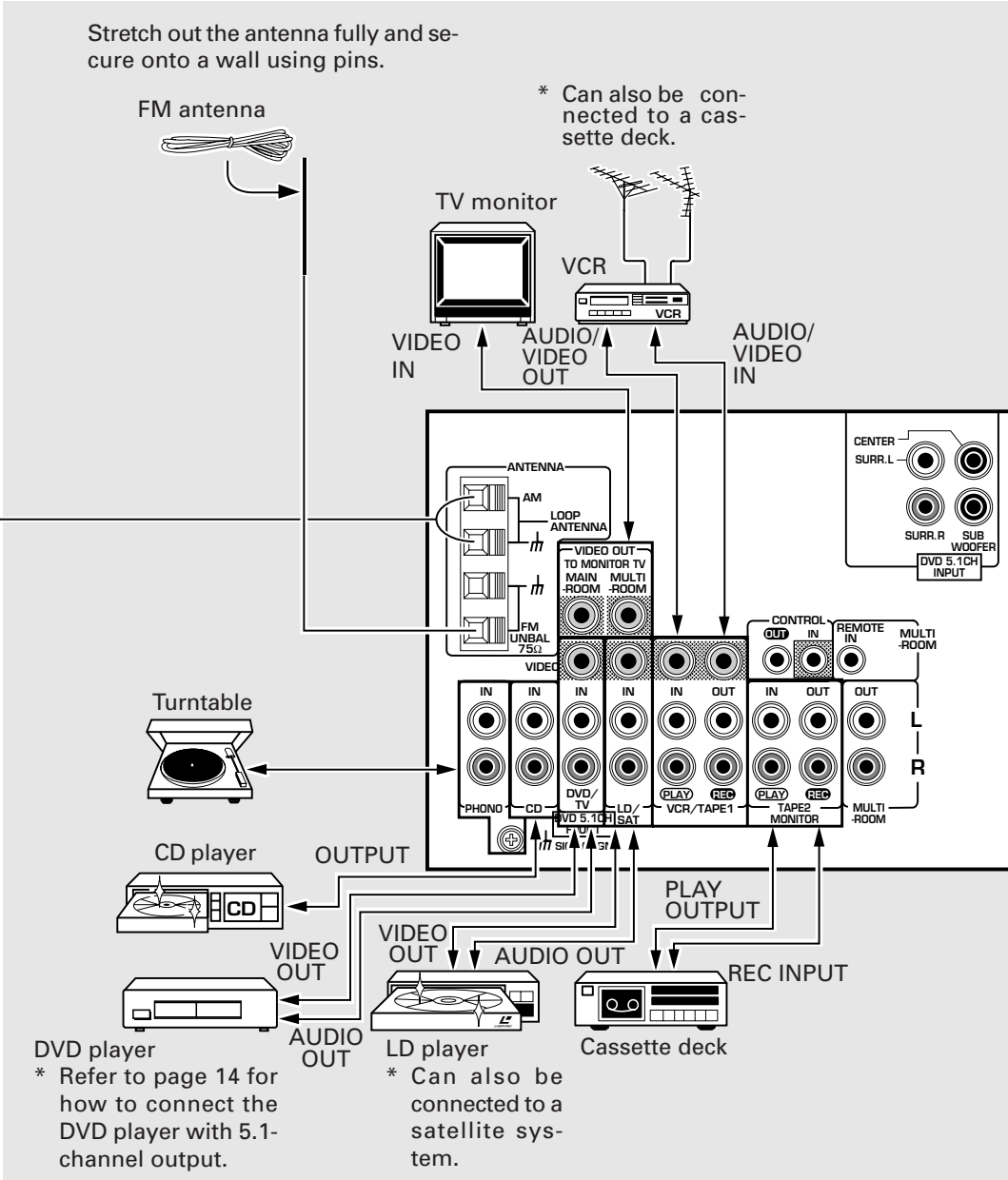


When attaching onto a wall, etc.



Face towards the direction with the best reception.

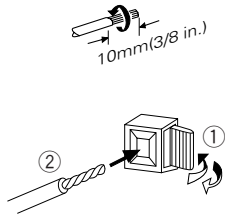
Stretch out the antenna fully and secure onto a wall using pins.



* Refer to page 14 for how to connect the DVD player with 5.1-channel output.

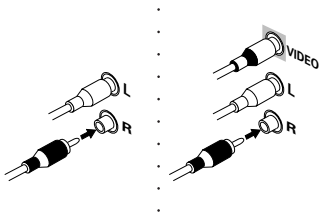
* Can also be connected to a satellite system.

■ Antenna terminal



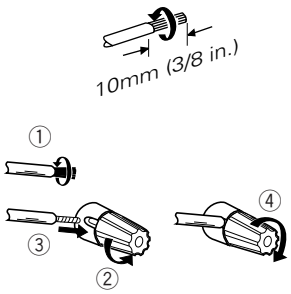
While pressing lever①, insert the antenna wire② into the connector hole, then release the lever①.

■ Input/output plugs

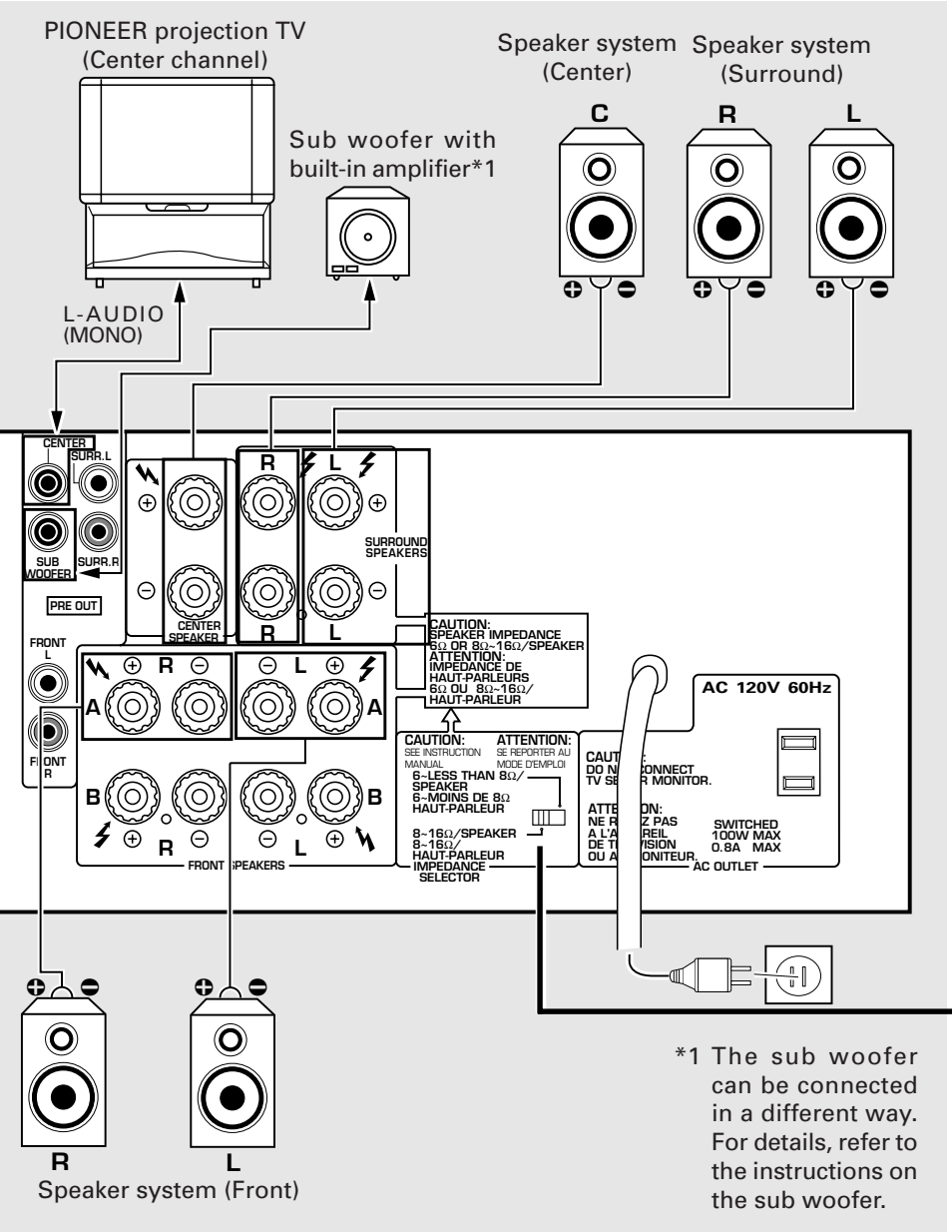


Connect the white plug to L, red plug to R, and yellow plug to VIDEO. Be sure to insert completely.

■ Speaker terminal



* The size of characters and terminal positions in the figures may differ from those on the actual product.



*1 The sub woofer can be connected in a different way. For details, refer to the instructions on the sub woofer.

AC OUTLET

[SWITCHED 100 W (0.8 A) MAX]

Power supplied through this outlet is turned on and off by the receiver's POWER switch. Total electrical power consumption of connected equipment should not exceed 100 W (0.8 A).

Memo

- This unit should be disconnected by removing the power plug from the wall socket when not in regular use, e.g., when on vacation.
- Do not connect appliances with high power consumption such as heaters, irons, or television sets to this AC OUTLET in order to avoid overheating and fire risk. This can also cause the receiver to malfunction.

CAUTION:
DO NOT CONNECT A MONI-TOR OR TV SET TO THIS UNIT'S AC OUTLET.

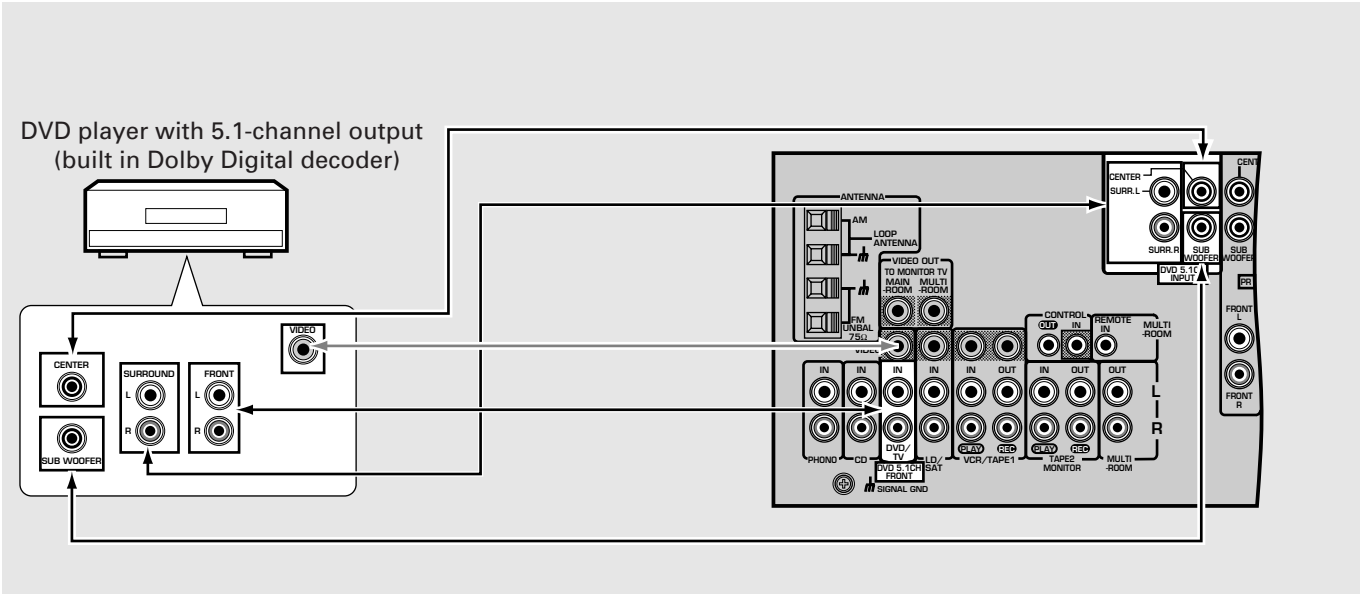
Use speakers with nominal impedance of 6 Ω to 8 Ω or 8 Ω to 16 Ω.

- When using speakers with impedance of 6 Ω or more and less than 8 Ω, set the IMPEDANCE SELECTOR to the "6 ~ LESS THAN 8 Ω" position.
- When using 8 Ω to 16 Ω, set the IMPEDANCE SELECTOR to "8 ~ 16 Ω" position.

DVD 5.1-channel input terminals

When using DVD/TV function, the unit supports both 2-channel and 5.1-channel input (see page 35, "DVD 5.1-CHANNEL INPUT MODE"). When the 5.1-channel mode is selected, SURROUND L, R, CENTER, and SUB WOOFER terminals are enabled, thus allowing the connection of a Dolby Digital decoder or DVD player with 5.1-channel output.

[Connection Example]

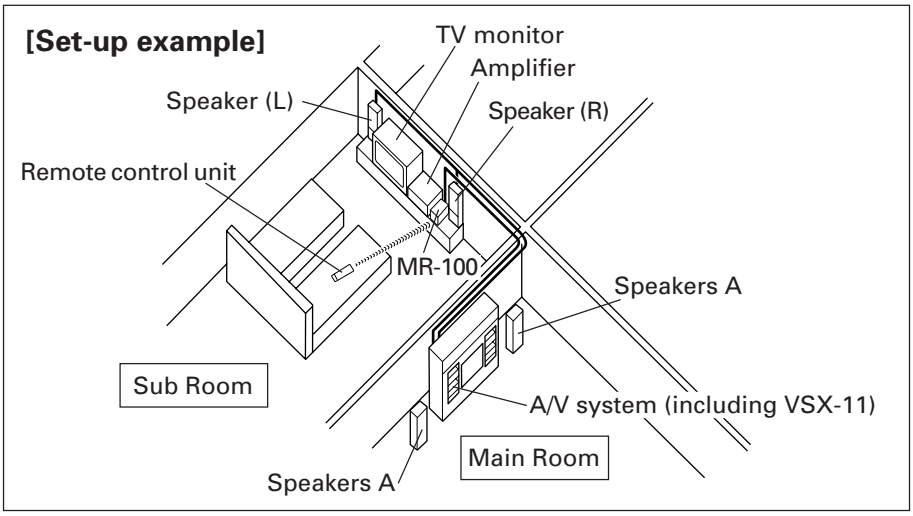


Memo

5.1-channel inputs are supported only during use of the DVD/TV function.
Other functions cannot be used with 5.1-channel input.

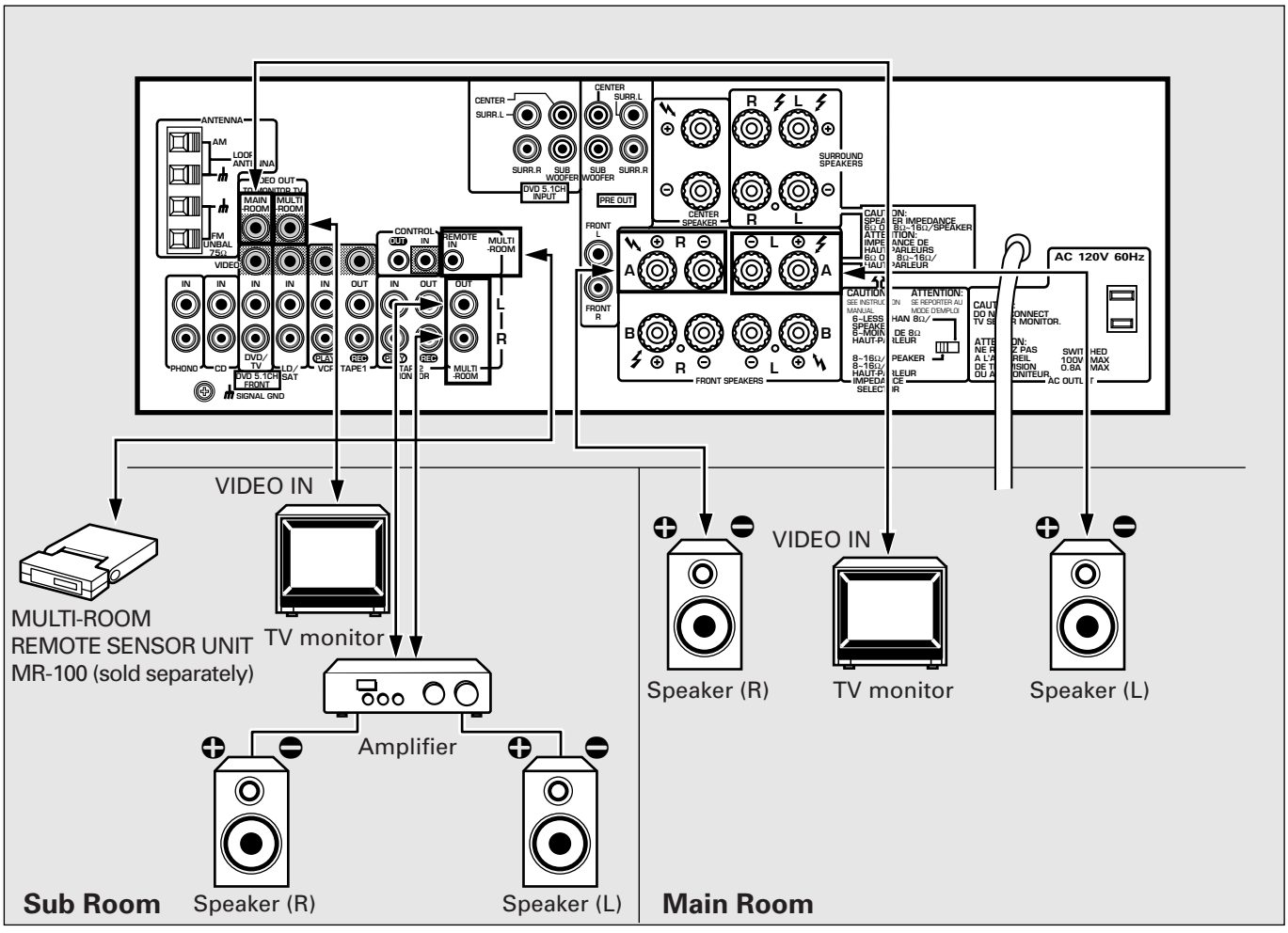
Multi-room connections

By connecting the control terminal of a CD player or cassette deck, etc. with the SR mark and the control terminal of this unit, and the MULTI-ROOM REMOTE SENSOR UNIT (MR-100 sold separately) to the MULTI-ROOM REMOTE IN terminal, the remote control unit of this unit can be used to control the equipments including this unit in the main room from the sub room where the MR-100 is placed.



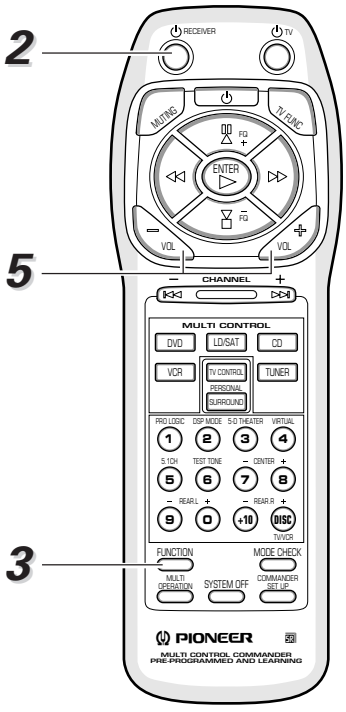
Memo

Be careful not to the wrong connections for CONTROL IN/OUT (black) and MULTI-ROOM REMOTE IN (green).



SWITCHING THE INPUT SIGNAL

Selecting the source to be played



Memo

Turn off TAPE 2 Monitor (the TAPE 2 indicator goes off).

1. **Turn ON the power of the equipment to be played.**

* Set the input selector of the TV monitor to the source input from this unit.

2. **Turn ON the power of the receiver.**

STANDBY indicator goes off.

3. **Select the source to be played.**

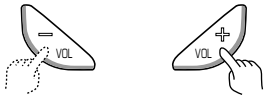
TUNER → CD → LD/SAT → DVD/TV* → VCR/TAPE1 → PHONO

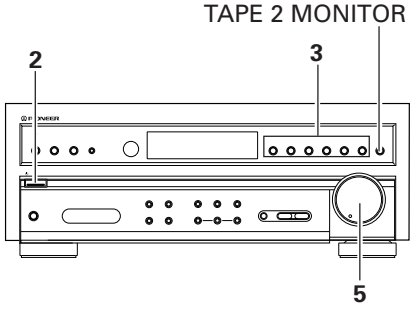
* The DVD/TV function supports 5.1-channel inputs (see page 35).

- All sources except PHONO can be directly selected by using the MULTI CONTROL.

4. **Play back the source.**

5. **Adjust the volume.**





■ Operating with the main unit

1. Turn ON the power of the equipment to be played.
2. Turn ON the power of the receiver.
3. Select the source to be played using the function buttons.
4. Play back the source.
5. Adjust the volume.

Memo

Press the DVD/TV function button repeatedly to alternate between 2-channel input and 5.1-channel input (see page 35).

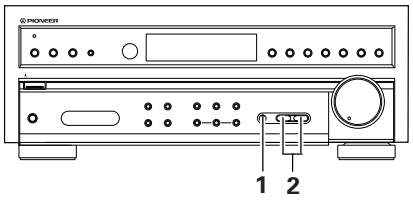
■ Playback TAPE 2

In step 3 above, select TAPE 2 by pressing the TAPE 2 MONITOR button (the TAPE 2 indicator will light).

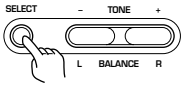
- TAPE 2 is given preferential selection over other functions; when the TAPE 2 is turned off (the TAPE 2 indicator goes out), the unit reverts automatically to the previously selected function.

TONE/BALANCE CONTROL

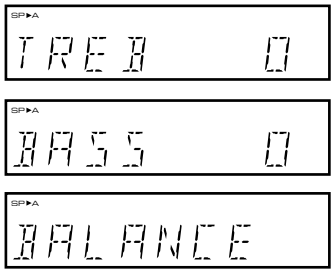
Press the SELECT button to choose the desired function (tone control or balance control), then use the TONE (+/–) and BALANCE (L/R) buttons to adjust the function as desired.



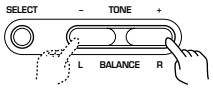
1. Choose the desired function.



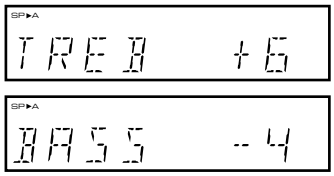
TREBLE control → BASS control → BALANCE control



2. Adjust the function as desired.

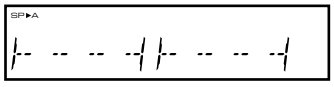


TREBLE:
-8 dB~+8 dB, 2dB/step
BASS:
-8 dB~+8 dB, 2dB/step

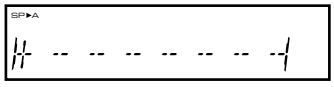


BALANCE:
L-side, 21-step
R-side, 21-step

Center position

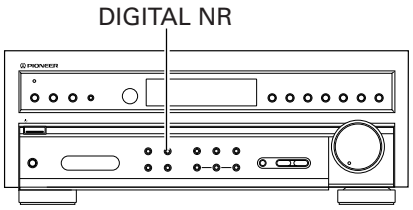


Left max. position

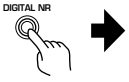


DIGITAL NOISE REDUCTION (DNR)

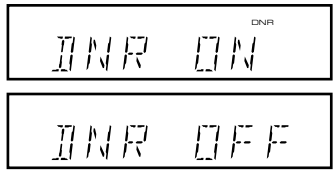
Signals are digitally filtered into multiple frequency bands, and noise is eliminated by expanding the difference between the music signal and the noise. This function can be used only during 2-channel operation (cannot be used during DIRECT mode).



Press the DIGITAL NR button.

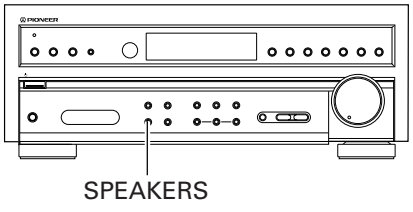


ON → OFF

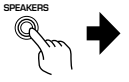


SPEAKERS SWITCH

Use to select speaker systems A and B.



Press the SPEAKERS button.

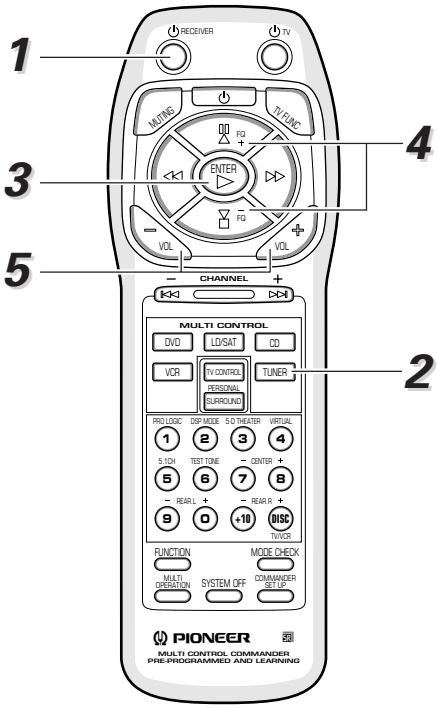


SP▶A (SPEAKERS A) → SP▶ B (SPEAKERS B) → SP▶AB (SPEAKERS A and B) → SP▶ (SPEAKERS off) → SP▶A

Memo

When selecting SP▶AB (SPEAKERS A and B), no sound will be produced if speakers are not connected to both sets of SPEAKERS A and B terminals.

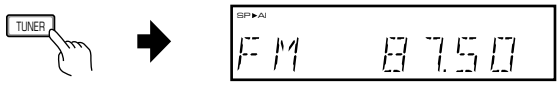
LISTENING TO FM/AM BROADCASTS



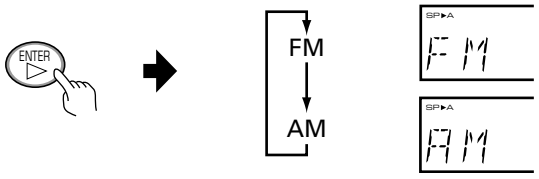
Memo Turn OFF TAPE 2 MONITOR (the TAPE 2 Indicator goes off).

1. Turn ON the power of the receiver.

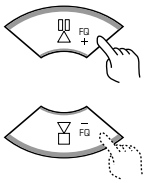
2. Set the TUNER function.



3. Select the band (FM or AM).



4. Select the broadcast station.



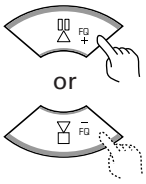
Refer to "Selecting broadcast stations" below.

5. Adjust the volume.

Selecting broadcast stations

(For example, when selecting an FM broadcast)

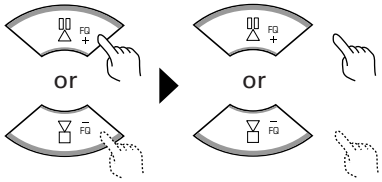
① Selecting step by step.



Press lightly and release.

87.50
87.60
87.70
⋮

② Selecting automatically.



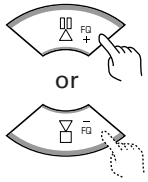
(Press and hold for approx. 1 second, then release)

87.50

89.50

Stops when received.

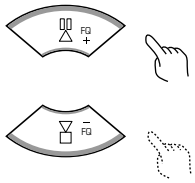
③ Selecting at high speed.

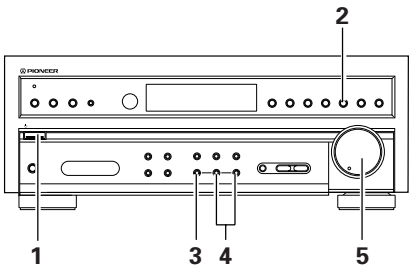


Press continuously

87.50
87.60
⋮
89.50

Stops when released.





■ Receiving a radio broadcast with the main unit.

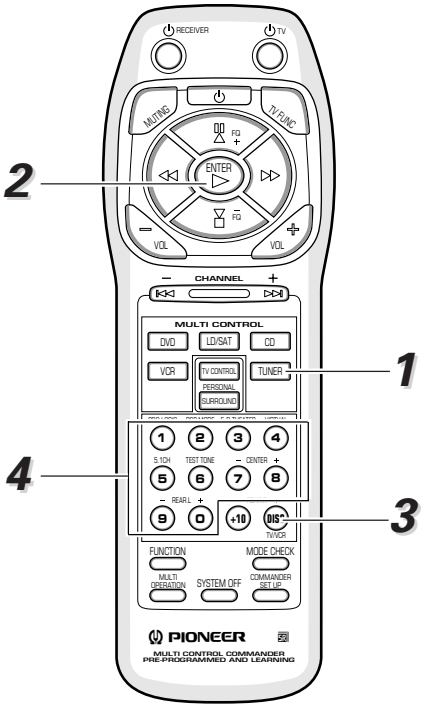
1. **Press the POWER button.**
2. **Press the FM/AM button to select an FM or AM broadcast.**
3. **If the memory channel is displayed (e.g., A1, B2, C3, etc.), press the TUNING SELECT button to set the frequency mode.**
   The frequency mode (FM or AM) of the received band will be displayed.
4. **Press the FREQUENCY (+/–) buttons to tune in the desired station frequency.**
   Three methods can be used to tune in stations. For details see p. 18, "Selecting broadcast stations."
   The TUNED indicator will light when a broadcast program is received.
5. **Adjust the volume.**

Memo

- The TUNED indicator will not light when a broadcast station is too far away or when the broadcasting signal is weak.

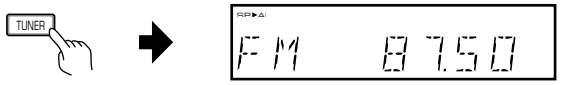
Directly inputting the frequency [Direct Access (remote control unit only)]

A broadcast station (frequency) can be directly selected using the number buttons on the remote control unit.



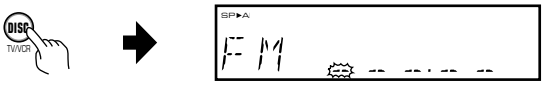
Memo Turn OFF the TAPE 2 MONITOR (the TAPE 2 indicator goes off).

1. Set the TUNER function.



2. Select the band (FM or AM).

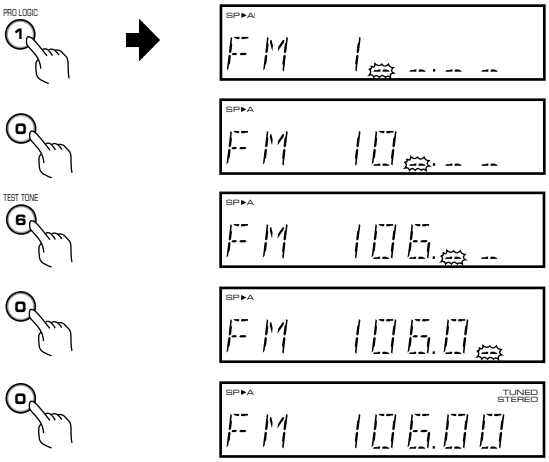
3. Set the direct access mode.



4. Select the broadcast station.

Press the numbers of the frequency to be received in order.

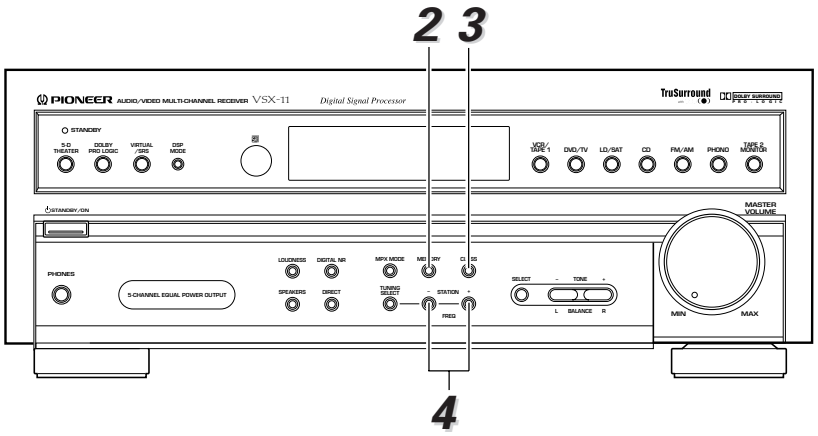
For example, to receive FM 106.00 MHz.



■ Canceling the frequency input

The frequency input can be canceled by pressing the DISC button again. Input the frequency again correctly.

Memorizing frequently used stations (main unit only)

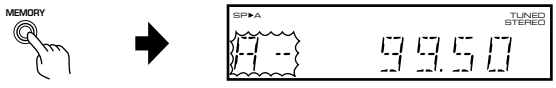


Memo

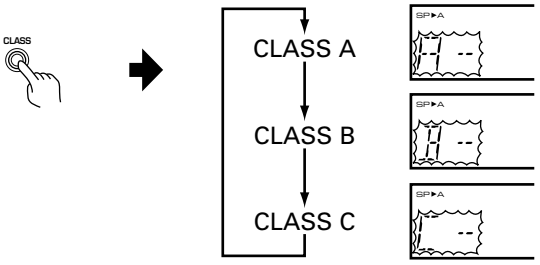
- The frequency received and MPX MODE (FM only) can be memorized.
- Up to 10 stations (channels 1 – 0) can be memorized in each of three classes (A/B/C).

1. **Receive the desired station.** → Refer to "LISTENING TO FM/AM BROADCASTS" (Pages 18 and 19).

2. **Set the MEMORY mode.**



3. **Select the desired class number.**

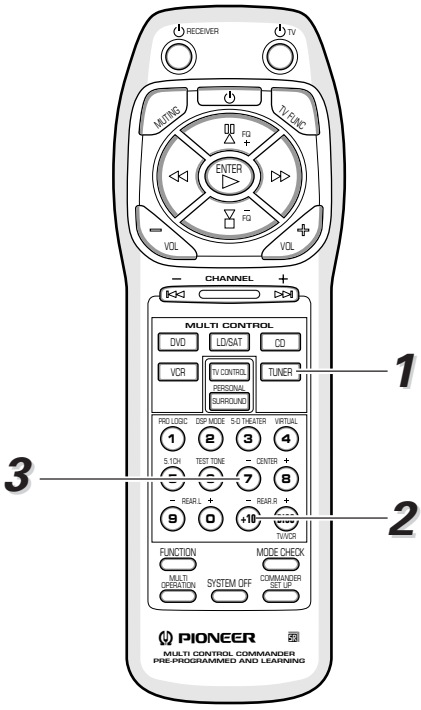


4. **Select the desired station number.**

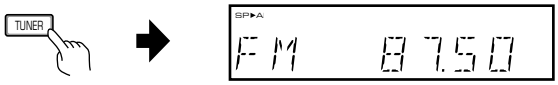
The selection will be automatically memorized in 5 seconds. (When the station number changes from flashing to steadily lighted, the station has been memorized.)

Repeat steps 1 to 4 to memorize up to 30 stations.

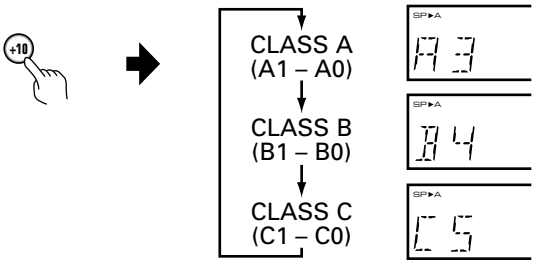
Listening to Memorized Stations



1. **Set the TUNER function.**



2. **Select the CLASS (A/B/C) in which the desired station is memorized.**

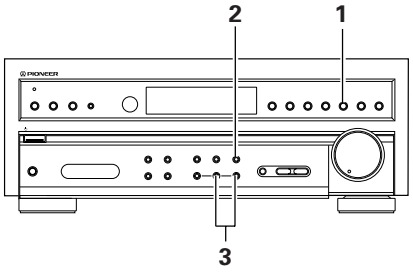


3. **Select the station number of the desired station.**

Example:
When FM99.50 MHz has been memorized in channel 7 of CLASS B.

Memo

The CHANNEL +/– buttons can also be used to select the memorized station numbers.



■ Operating with the main unit

1. **Press the FM/AM button.**
2. **Press the CLASS button, and select the CLASS (A/B/C) in which the desired station has been memorized.**
3. **Press the STATION + or – button, and select the desired station number which has been memorized.**

Memo

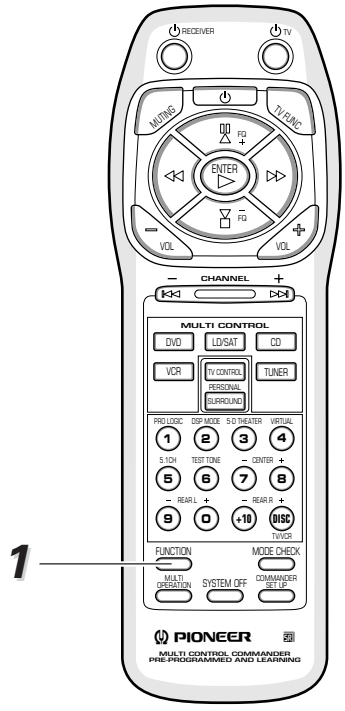
When the power cord of the unit is disconnected from the wall outlet for several days, the stations memorized will be erased.

■ Last Station Memory

By turning ON the power and setting TUNER, the station set before the power was last turned OFF will be received.

RECORDING

Recording with TAPE 1 or TAPE 2

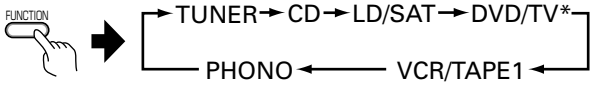


Memo

Turn ON the power of all equipment to be used.

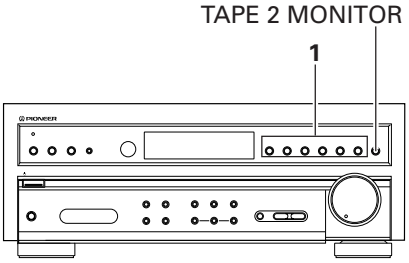
1. Select the source to be recorded.

* Except for PHONO, the sources can directly be selected using MULTI CONTROL.



2. Start recording with TAPE 1 or TAPE 2.

3. Play back the source to be recorded.



■ Operating with the main unit

1. Select the source to be recorded using the Function buttons.
2. Start recording with TAPE 1 or TAPE 2.
3. Play back the source to be recorded.

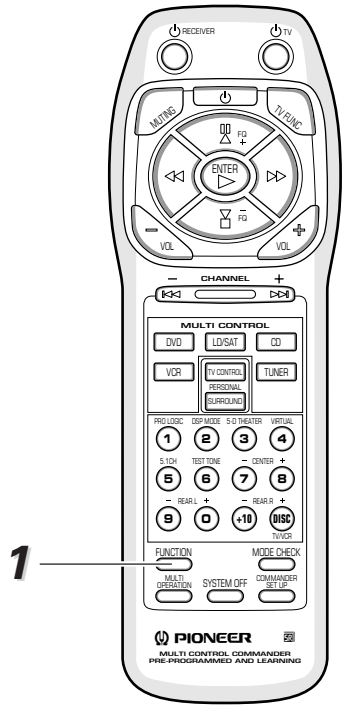
Memo

- The TAPE 2 sounds cannot be recorded.
- The VCR/TAPE 1 sounds cannot be recorded with TAPE 1.
- The volume, tone, balance, and surround settings of this unit have no effect on the recording signal.

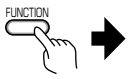
■ Recording Monitor

When recording with TAPE 2, if the connected recording device has a recording monitor function, turning ON the TAPE 2 MONITOR button will enable recording to be carried out simultaneously with playback monitoring (the TAPE 2 indicator lights).

Recording with a VCR



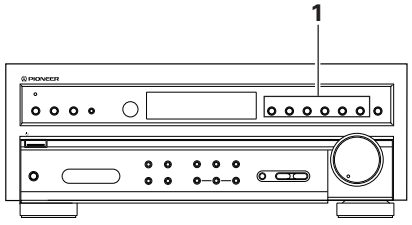
1. **Select the source to be recorded.**



(TUNER) → (CD) → LD/SAT → DVD/TV → (VCR/TAPE1) → (PHONO) →

2. **Start recording with a VCR.**

3. **Play back the source to be recorded.**



■ Operating with the main unit

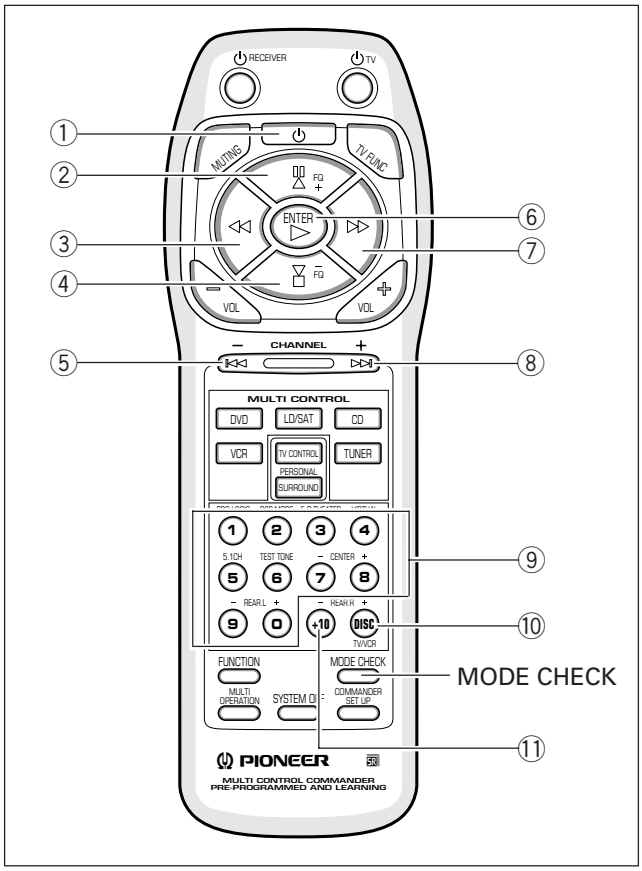
1. Select the source to be recorded using the Function buttons.
2. Start recording with a VCR.
3. Play back the source to be recorded.

Memo

- The signal from VCR/TAPE 1 cannot be recorded.
- The signal from TAPE 2 cannot be recorded.
- The volume, tone, balance, and surround settings of this unit have no effect on the recording signal.

OPERATING OTHER COMPONENTS

Your PIONEER products and other manufacturers' equipment (VCR, TV, LD player, CD player, etc.) can be remote controlled. (This requires the learning and setting of the remote control codes of other manufacturers' products.)
Please refer to page 36.



SAT (Satellite Tuner) operation

Press the MODE CHECK button to light the LD/SAT button, and operate as desired using the following buttons.

① **(Power)**
Use to turn ON/OFF the power of the satellite broadcast tuner.

② ▲, ③ ◄, ④ ▼, ⑦ ►
Serve as cursor buttons for obtaining information on programs.

⑥ **ENTER**
Use to set the selected position of the cursor using the ②, ③, ④, and ⑦ buttons.

⑤ ⏮, ⑧⏭ **(GUIDE)**
Use to turn ON/OFF the program information screen.

⑨ **Number buttons**
Use to select satellite broadcast channels.

⑩ **(MENU)**
Use to turn ON/OFF the main menu.

LD PLAYER/DVD PLAYER operation

Press the MODE CHECK button to light the LD/SAT button or DVD button, and operate as desired using the following buttons.

① **(Power)**
Use to turn ON/OFF the LD player or DVD player.

② ⏸
Use to pause. (With some players, pressing this button may set still pictures.)

③ ◄◄
Continuously pressing this button will set fast reverse playback.

④ ■
Pressing this button during playback will stop the unit. (With some LD players, the disc table may come out if pressed during stop.)

⑤ ⏮
Pressing and releasing this button immediately returns playback to the beginning of the chapter (track) currently being played. Pressing it continuously returns playback to the beginning of a previous chapter (track).

⑥ ►
Starts playback.

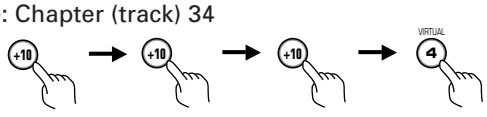
⑦ ►►
Pressing this button continuously will start fast forward playback.

⑧ ⏭
Pressing and releasing this button immediately advances playback to the beginning of the next chapter (track). Pressing it continuously advances playback to the beginning of a future chapter (track).

⑨ **Number buttons**
Use to select the chapter (track).

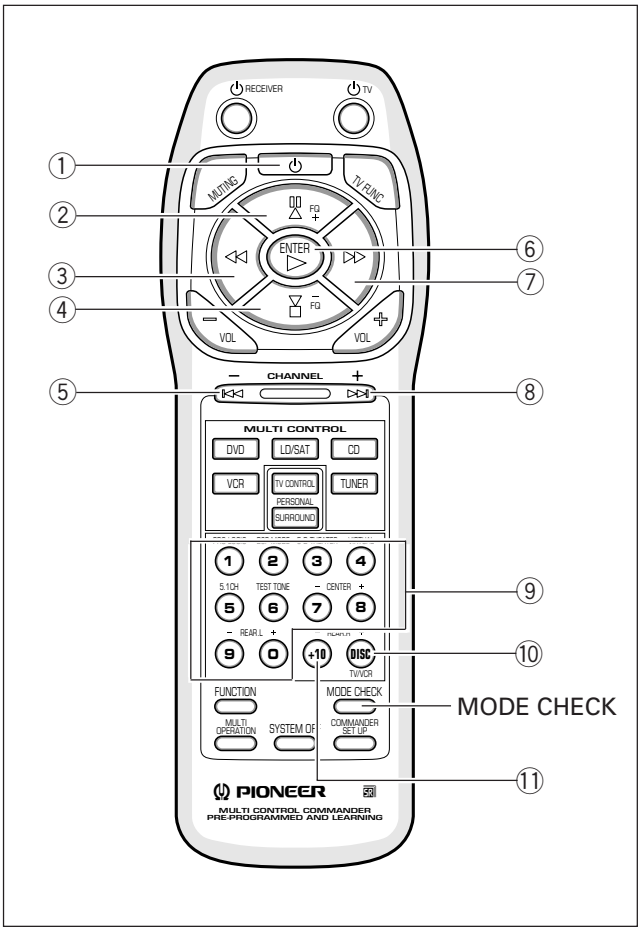
⑩ **(SIDE A/B for LD) (MENU for DVD)**
LD: Switches between sides A and B of the disc.
DVD: Turns ON/OFF the menu screen.

⑪ **+10 button**
Use to select chapter (track) numbers higher than 10.
Example: Chapter (track) 34



Memo

When operating a DVD LD player with the LD/SAT function, set the manufacturer code to "102" in the preset mode. Please refer to page 36.



CD PLAYER operation

Press the MODE CHECK button to light the CD button, and operate as desired using the following buttons.

① ⏻ **(Power)**
Use to turn ON/OFF the CD player.

② ⏸
Use to pause playback.

③ ◄◄
Continuously pressing this button fast reverses playback.

④ ■
Stops playback.

⑤ |◄◄
Pressing and releasing this button immediately returns playback to the beginning of the track currently being played. Pressing it continuously returns playback to the beginning of a previous track.

⑥ ►
Starts playback.

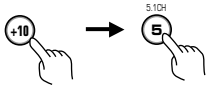
⑦ ►►
Pressing this button continuously fast forwards playback.

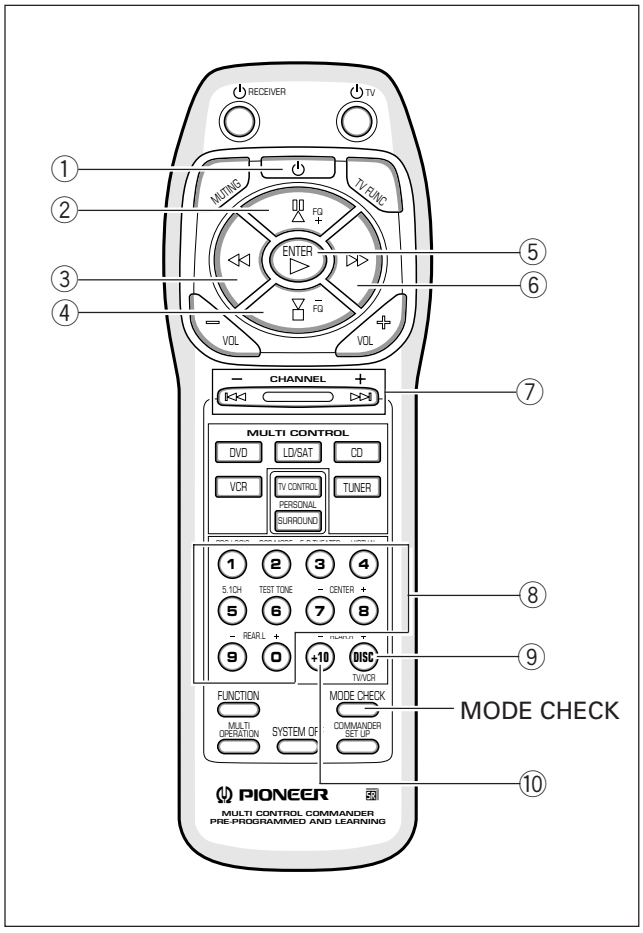
⑧ ►►|
Pressing and releasing this button immediately advances playback to the beginning of the next track. Pressing it continuously advances playback to the beginning of a future track.

⑨ **Number buttons**
Use to select the track.

⑩ **DISC**
Use to select the disc number.
(Some CD players cannot be operated.)
Example:
When selecting disc number 27

⑪ **+10 (track) button**
Use to select the track number.
(Some CD players cannot be operated.)
Example:
When selecting track number 15





CASSETTE DECK/VCR operation

Press the MODE CHECK button to light the VCR button, and operate as desired using the following buttons.

[Operations common to the cassette deck/ VCR]

① ⏻ **(Power)**

Use to turn ON/OFF the power of the cassette deck and VCR.
(Cannot turn ON/OFF some cassette decks.)

② ❚❚

Pauses playback and recording (sets still pictures).

③ ◄◄

Rewinds the tape. Pressing this button during playback starts fast rewind playback.

④ ■

Stops tape running.

⑤ ►

Starts playback.

⑥ ►►

Fast forwards the tape. Pressing this button during playback starts fast forward playback.

[VCR only]

⑦ **CHANNEL + , –**

Changes the channels of the TV tuner in the VCR.

⑧ **Number buttons**

Use for selecting the channels of the TV tuner in the VCR.

⑨ **TV/VCR**

Use to switch the VCR antenna output to TV or VCR.

⑩ ⑩ **(Enter)**

Sets the channels selected using the Number buttons. (Some models may not require this step.)

[Cassette deck only]

For double cassette decks, the ⑧ Number buttons can be used to operate deck 1 also.
(Some models cannot be operated.)

⑧ PRO LOGIC ① **(◄◄)**

Fast forwards the tape in the direction of the arrow.

DSP MODE ② **(■)**

Stops tape running.

5.0 THEATER ③ **(►)**

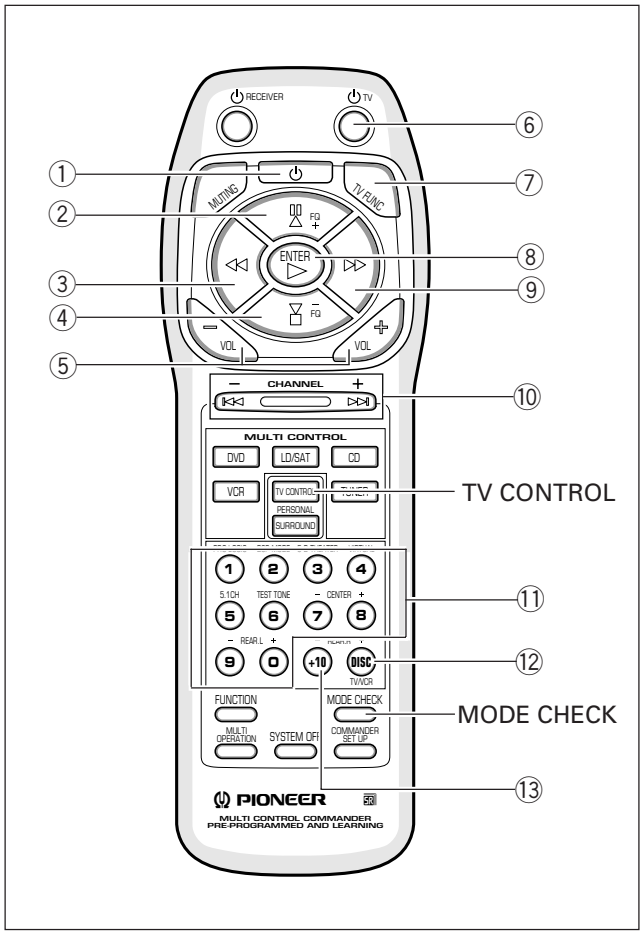
Start playback.

VIRTUAL ④ **(►►)**

Fast forwards the tape in the direction of the arrow.

Memo

- Both the cassette deck and VCR can not be used at the same time.
- Pressing ② ❚❚ and ④ ■ simultaneously will also set REC for the VCR and cassette deck.
  REC cannot be set for deck 1 of double cassette decks.



TV operation

Press the TV CONTROL button, and operate as desired using the following buttons.

① **(Power)**
Use to turn ON/OFF the TV power.

② ▲
Raises the TV volume.

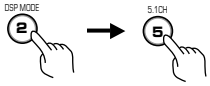
④ ▼
Lowers the TV volume.

⑤ **VOL +, –**
Use to adjust the TV volume. (When operating other devices, this is used for adjusting the volume of this unit.)

⑧ **ENTER**
Sets the channels selected using the Number buttons. (Some models may not require this operation.)

⑩ **CHANNEL +, –**
Use to select a TV broadcast channel.

⑪ **Number buttons**
Use to select TV broadcast channels.
Example: When selecting channel 25



With some models, press ⑧ ENTER after selecting the channel to set the selection.

⑬ **(TV function)**
Use to select the TV input. (Cannot be selected with some TVs.)

[Operation for TVs with a menu screen (PIONEER products only)]

②▲,③ ◄,④ ▼,⑨ ►
Use to move the cursor in the menu screen up, down, left, and right.

⑧ **ENTER**
Sets the position of the cursor selected using the ②, ③, ④, and ⑨ buttons.

⑫ **(MENU)**
Displays the menu screen for adjusting picture quality.

The following buttons can be used regardless of the input source setting.

⑥ **TV (TV power)**
Use to turn ON/OFF the TV power.

⑦ **TV FUNC**
Use to select the TV input. (Cannot be selected with some TVs.)

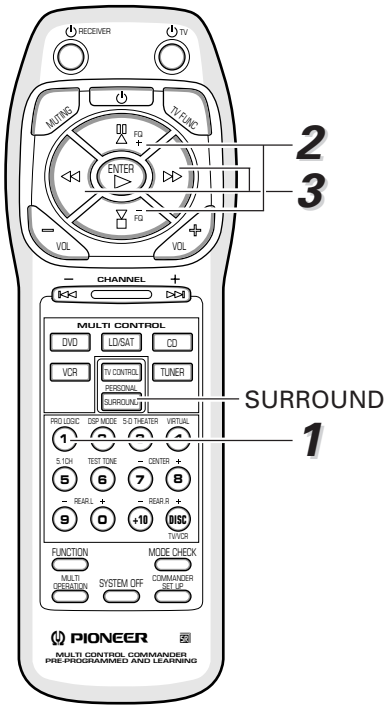
MODE CHECK BUTTON

When the MODE CHECK button is pressed once, the MULTI CONTROL button of the function currently selected will light. When the MODE CHECK button is pressed again while lit, the MULTI CONTROL buttons will light in order. This enables the function of the lit button to be remote controlled without having to set the function on this unit.

ENJOYING SURROUND EFFECTS

To enable surround operation, press the SURROUND button after selecting the function.

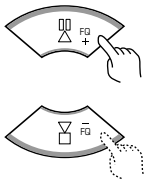
Switching the Dolby Pro Logic surround



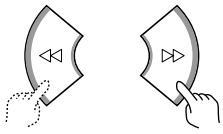
1. **Switch Dolby Pro Logic.**

Each time it is pressed, the mode is turned ON/OFF.

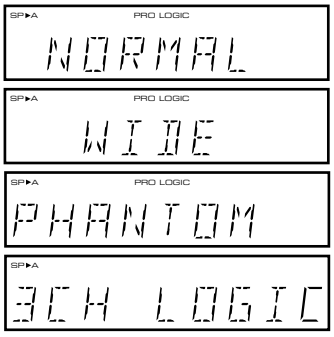
2. **Select "Cch MODE".**



3. **Select the center mode or Dolby 3CH LOGIC.**



NORMAL
WIDE
PHANTOM
DOLBY 3CH LOGIC

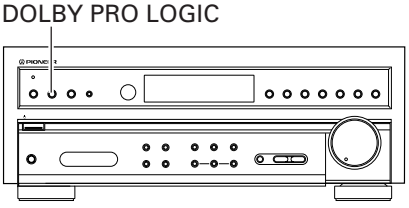


■ Operating with the main unit

Press the DOLBY PRO LOGIC button.

Dolby Pro Logic is turned ON/OFF each time it is pressed.

DOLBY PRO LOGIC

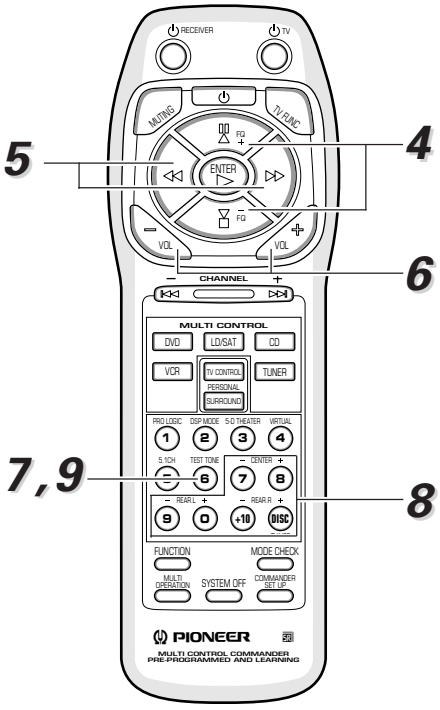


Memo

- When selecting PHANTOM in the center mode, no sound is output from the center speaker.
- When 3CH LOGIC is selected in the center mode, no sound from the rear speaker is output.

■ Center modes and 3CH LOGIC

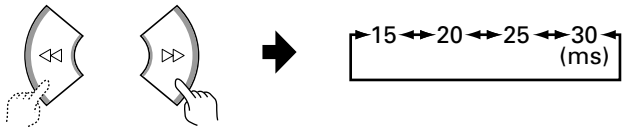
NORMAL	WIDE	PHANTOM	3CH LOGIC
Plays back middle and high range sounds from the CENTER speaker. Sounds are at the fixed position. The bass from the center channel is played back by the FRONT speakers.	Using the same speakers as the FRONT speakers for the CENTER speaker enables sounds from bass to treble to be played back more naturally.	The center channel sounds are played back between the L and R FRONT speakers.	The surround channel sounds and center channel bass sounds are played back between the L and R FRONT speakers.



4. **Select "DELAY".**

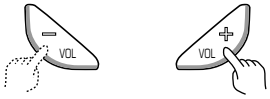
DELAY cannot be selected if "3CH LOGIC" has been set in step 3 (go on to step 6).

5. **Select the delay time.**



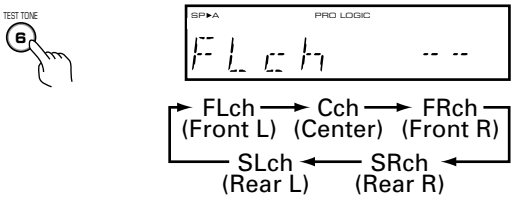
- The delay time is set so as to provide virtual equalization of the distance between the listening position and the rear speakers, and the distance between the listening position and the front speakers. The default setting is 20 ms, which is designed for a situation in which the distance from the listening position to the rear speakers is about 5 feet (1.5m) closer than the distance to the front speakers (in other words, the perceived distance will be some 5 feet (1.5 m) farther away than the actual distance). A setting of 5 ms corresponds to a distance of about 5 feet (1.5 m).
- The delay time setting can be used only in conjunction with the Dolby Pro Logic mode.

6. **Adjust to the desired volume.**



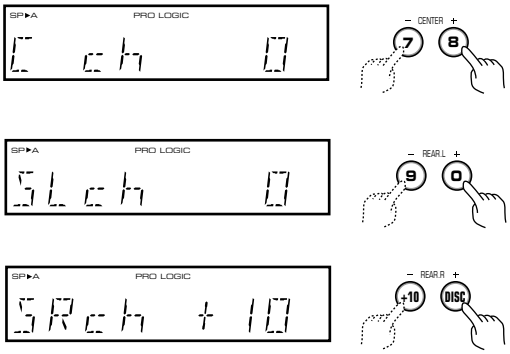
7. **Set the test tone.**

Sound will be produced from each speaker, in the sequence shown.



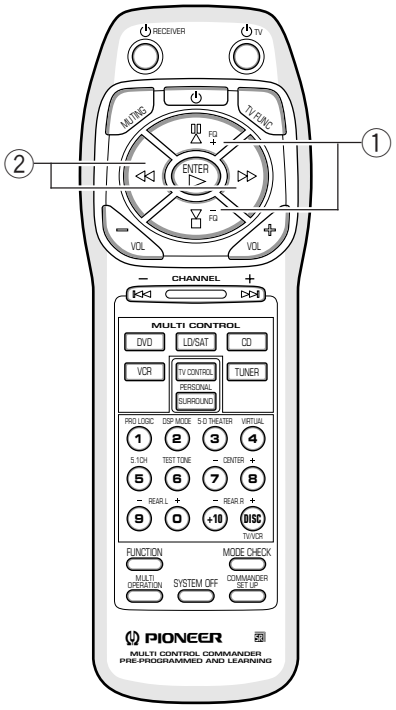
8. **Adjust the center level, rear L level, rear R level so that the test tone volume output from each speaker is the same.**

- Adjust the level when the display appears for the channel to be adjusted.



9. **Turn OFF the test tone.**

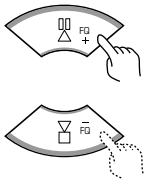
10. **Play the desired source.**



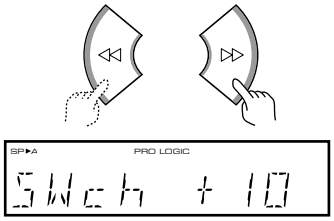
Adjust the sub woofer level

(Operates only when a sub-woofer is connected)

① **Select "SWch".**



② **Adjust the level (–10 dB ~ +10 dB).**

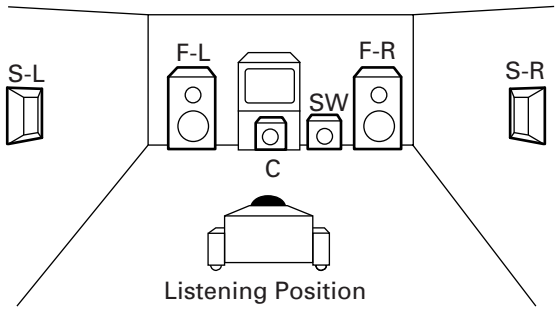


Memo

- When PRO LOGIC is selected, the VIRTUAL, DIGITAL NR and DIRECT modes are automatically switched off.
- When selecting PHANTOM in the center mode, no test tone is output from the center speaker.
- When 3CH LOGIC is selected in the center mode, no test tone from the rear speaker is output.

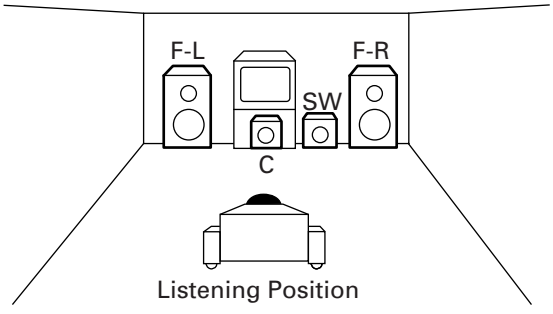
Dolby Pro Logic Surround

Set to this position for video and music sources (especially sources bearing DOLBY SURROUND marks). Dolby Pro Logic Surround continuously detects the size and direction of signals. As a result, the position of the sound source becomes clear, enabling reproduction of natural sound flow.



Dolby 3CH Logic

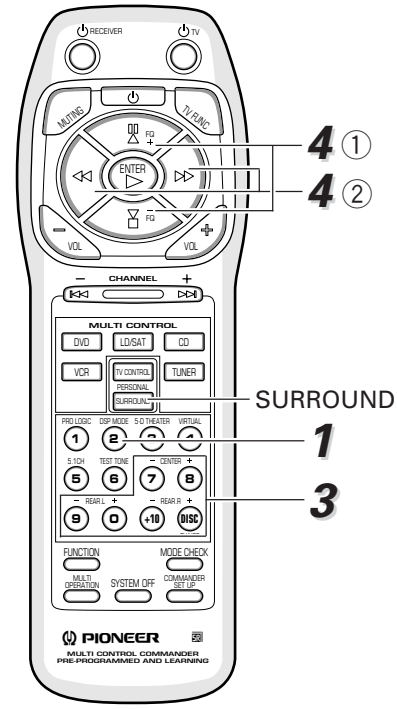
Same system as the Dolby Pro Logic surround except that SURROUND speakers are not installed. SURROUND speaker signals are played back by the FRONT speakers, while preserving the center channel output for good dialog localization.



* In the above figure, F stands for front speakers, S for surround speakers, C for center speaker, SW for sub woofer, R for right, and L for left.

To enable surround operation, press the SURROUND button after selecting the function.

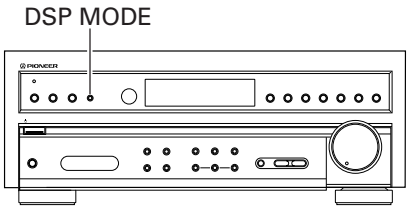
Selecting the surround effects (DSP mode)



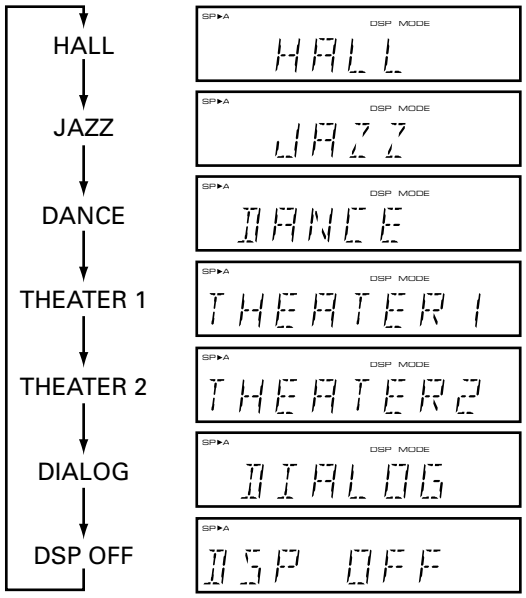
■ Operating with the main unit

Press the DSP MODE button.
Each time it is pressed, the surround effect change as follows.

DSP OFF→HALL→JAZZ→DANCE
DIALOG←THEATER 2←THEATER 1

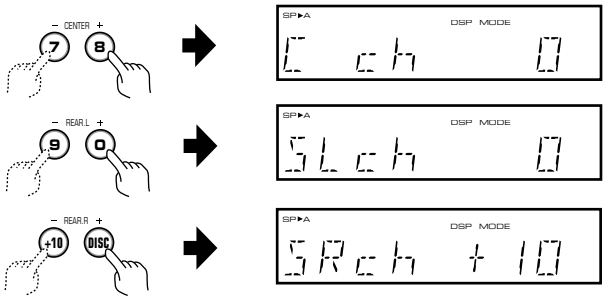


1. Select the surround effects.



2. Play back the source.

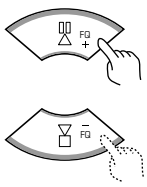
3. Set the CENTER level, REAR Left level, and REAR Right level as desired.



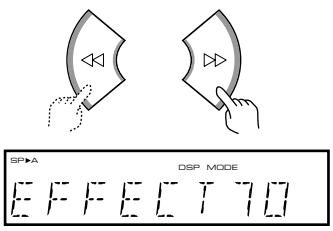
4. Adjust the effect level.

Adjust the sound reflection level (can be set within the range 10-90); higher settings will produce the sound-field effects of a room with high reflective properties.

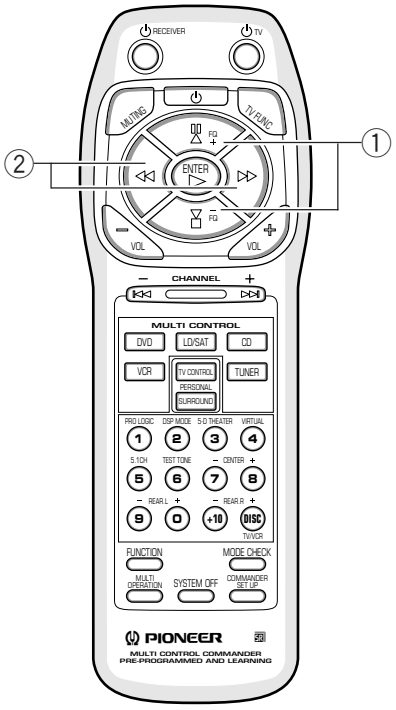
① **Select "EFFECT".**



② **Adjust the effect level as desired (ten steps, in range 10 – 90).**



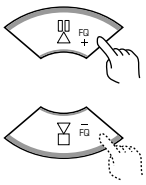
- EFFECT LEVEL cannot be adjusted when DIALOG is selected in the DSP mode.



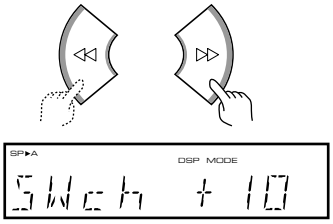
Adjust the sub woofer level

(Operates only when a sub-woofer is connected)

① **Select "SWch".**



② **Adjust the level (–10 dB ~ +10 dB).**



Memo

- When DSP mode is selected, the VIRTUAL, 5-D THEATER, DIGITAL NR and DIRECT modes are automatically switched off.
- Each channel level and effect level settings are memorized for each DSP mode.
- The DSP mode can be used together with the Dolby Pro Logic mode. In this case, the channel levels employed are those set for the Dolby Pro Logic mode.

■ DSP mode

HALL	Simulates the acoustic effects of a large concert hall. Suitable for classical music. Long delay time of reflected sounds, coupled with reverberation effects let the listener enjoy the dynamic and beautiful sounds characteristic of concert halls and powerful orchestral performances.
JAZZ	Simulates the acoustic effects of general jazz clubs with a floor space of around 400m^2 (approx.4200ft^2). Reflected sound is virtually below 100 ms, for the listener to enjoy live-band effects.
DANCE	Simulates the acoustic effects of discos with a square dance floor. Features strong bass sound. Reflected sound delay time is virtually below 50 ms, for the listener to enjoy the "fever" of disco sounds.
THEATER 1	Sets the delay time of the reflected sound best suited for playing back acoustic parameters of a medium-sized movie theater (with seating capacity of 300) in your living room. (About 30 to 120 msec.)
THEATER 2	Reproduces theater sound field effects without losing the localization of each channel. Theater effects can be enjoyed without losing Dolby Pro Logic effects when used in combination.
DIALOG	This mode is effective when watching movie videos. When this mode is selected, sound frequencies characteristic of the human voice are enhanced, making it easier to hear dialogue clearly. Even better effects are produced when this mode is used in conjunction with the Dolby Pro Logic mode (when playing movies bearing the DOLBY SURROUND trademark).

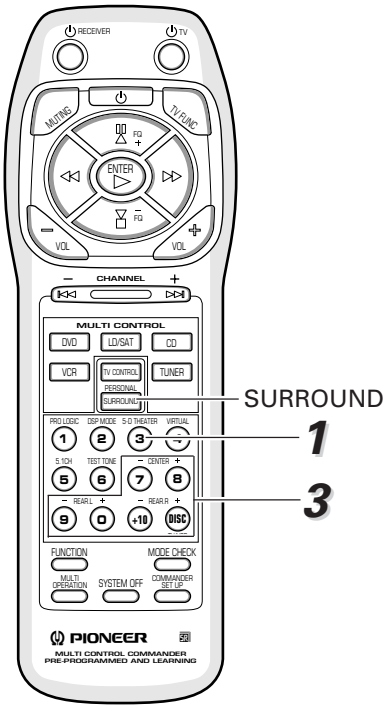
Memo

Use of THEATER 1, 2 or DIALOG together with the Dolby Pro Logic surround will produce better surround effects.

To enable surround operation, press the SURROUND button after selecting the function.

Turning ON 5-D THEATER

The 5-D THEATER function provides clear dynamic sound effects by outputting audio signals through the rear channel to simulate stereo sound. Mixing the surround effects with the 5-D THEATER effects will provide sound with depth.

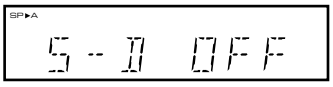


Memo

Effects may be less in scenes where sounds do not shift, between L and R channels.

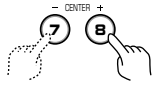
1. Switch 5-D THEATER.

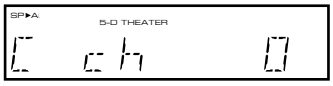
Each time it is pressed, the mode is turned ON/OFF.

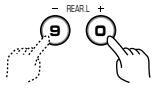


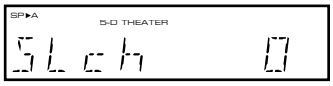
2. Play back the source.

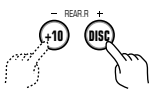
3. Set the CENTER level, REAR Left level, and REAR Right level as desired.

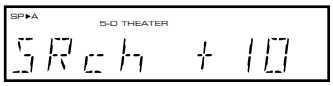








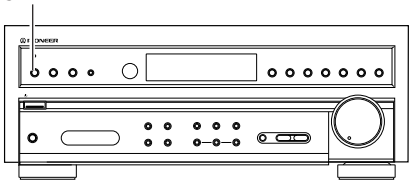




■ Operating with the main unit

Press the 5-D THEATER button.
5-D THEATER is turned ON/OFF each time it is pressed.

5-D THEATER



Memo

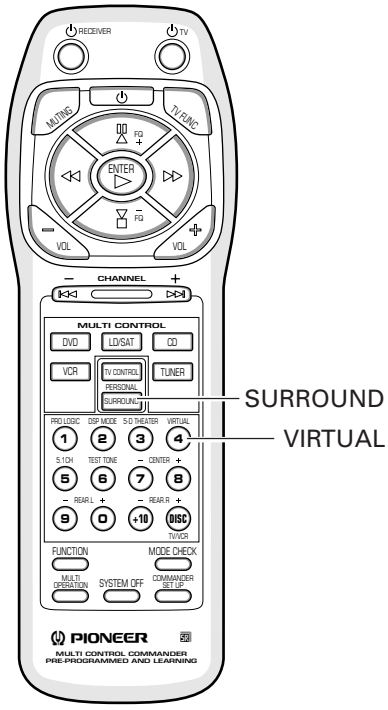
- When 5-D THEATER is selected, the VIRTUAL, DSP, DIGITAL NR and DIRECT modes are automatically switched off.
- Each channel level setting is memorized for the 5-D THEATER mode.
- When the 5-D THEATER mode is used in conjunction with DOLBY PRO LOGIC, sound is reproduced with higher speed, making it optimum for action movies and other fast-moving sources designed for use with DOLBY PRO LOGIC surround sound. In this case, the channel levels employed are those set for the Dolby Pro Logic mode.

To enable surround operation, press the SURROUND button after selecting the function.

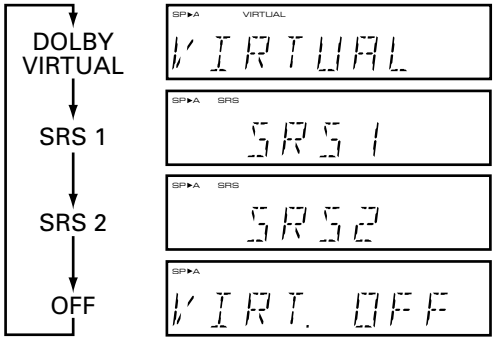
Selecting the virtual surround (Dolby Virtual/ SRS*)

* Registered in the US and selected foreign countries.

These modes provide 3-dimensional sound while using only the two front (L, R) speakers.



Select the virtual surround.



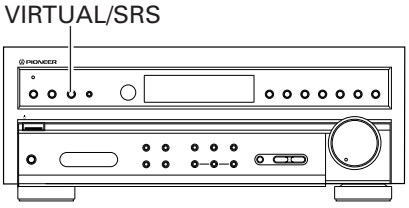
Memo

- When VIRTUAL/SRS is selected, the PRO LOGIC, DSP, 5-D THEATER, DIGITAL NR, LOUDNESS and DIRECT modes are automatically switched off.
- TONE CONTROL does not operate when VIRTUAL/SRS is selected.

■ Operating with the main unit

Press the VIRTUAL/SRS button.
Each time it is pressed, the virtual surround effects change as follows.

VIRTUAL → SRS 1 → SRS 2 → OFF



■ DOLBY VIRTUAL/SRS

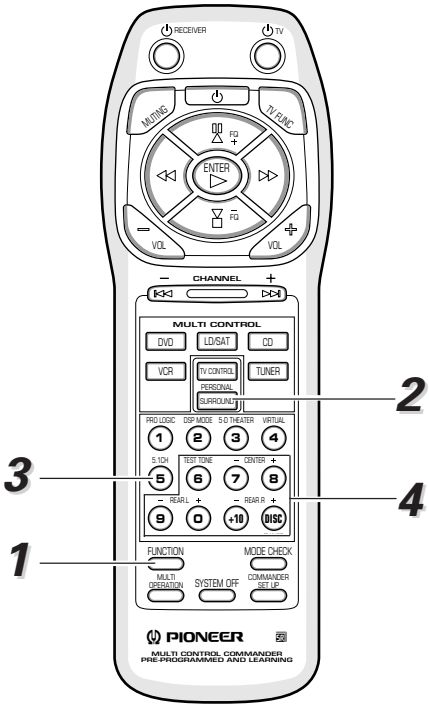
(TruSarround is a 3D surround technology developed by SRS Labs, Inc. Two speakers are used to expand the sound field.)

DOLBY VIRTUAL	Allows you to use only two front speakers (L and R) to enjoy sources recorded in Dolby surround (possessing the DOLBY SURROUND mark).
SRS 1	Suitable for classical and live music recordings which include the broad frequency ranges of a large auditorium. Recreates the expansive feeling of a concert hall.
SRS 2	Most suitable for pops and jazz recordings. Recreates the intimate atmosphere of smaller sound sessions.

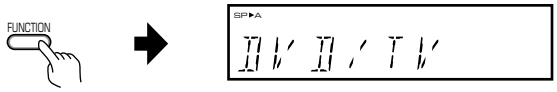
DVD 5.1-CHANNEL INPUT MODE

Ordinarily, the center, surround (L/R), and sub-woofer channel inputs are digitally processed from the front L/R channels. When this function set to on, the center, surround (L/R), and sub-woofer channel signals are those input to their own respective independent input terminals. This feature allows a Dolby Digital decoder or DVD player provided with 5.1-channel output (built-in Dolby Digital decoder) to be connected to the unit (see page 14).

This mode is enabled only when the DVD/TV function is selected.

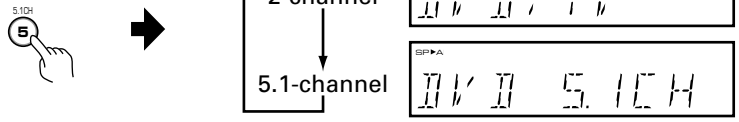


1. Set to the DVD/TV function.



2. Press the SURROUND button.

3. Press the 5.1 CH button.



4. Use the Test Tone to adjust the Level of each channel.

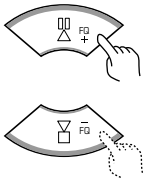
(The steps used are the same as steps 6 – 10 on p. 28 – 29.)

5. Play back the DVD.

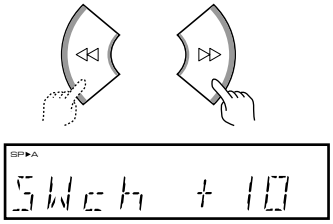
Adjust the sub woofer level

(Operates only when a sub-woofer is connected)

① **Select "SWch".**



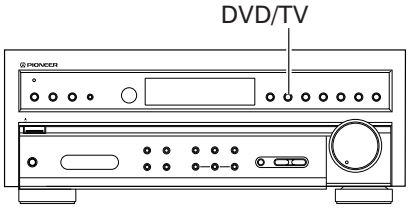
② **Adjust the level (–10 dB ~ +10 dB).**



■ Operating with the main unit

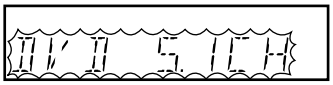
Press the DVD/TV button.

Press the DVD/TV button. Each time the button is pressed, the mode alternates between 2-channel and 5.1-channel.



Memo

- The VIRTUAL (SRS), PRO LOGIC, 5-D THEATER, DSP, DIGITAL NR and DIRECT modes do not operate during use of the DVD 5.1-channel mode. When any one of these six buttons is pressed, "DVD 5.1 CH" display flashes as a warning.

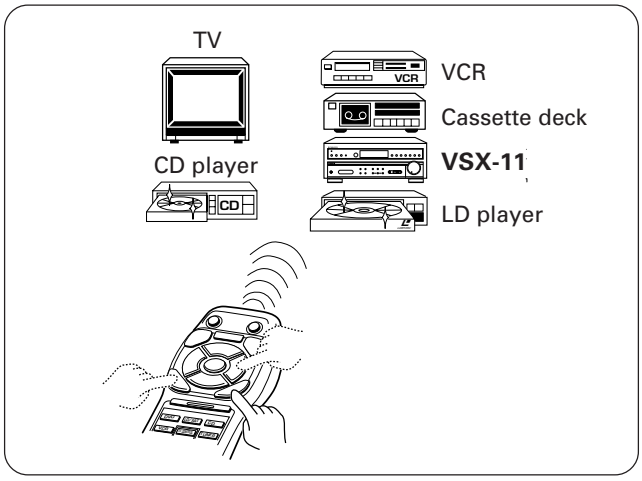


USEFUL FUNCTIONS OF THE REMOTE CONTROL UNIT

With the provided remote control unit, the following operations can easily be performed.

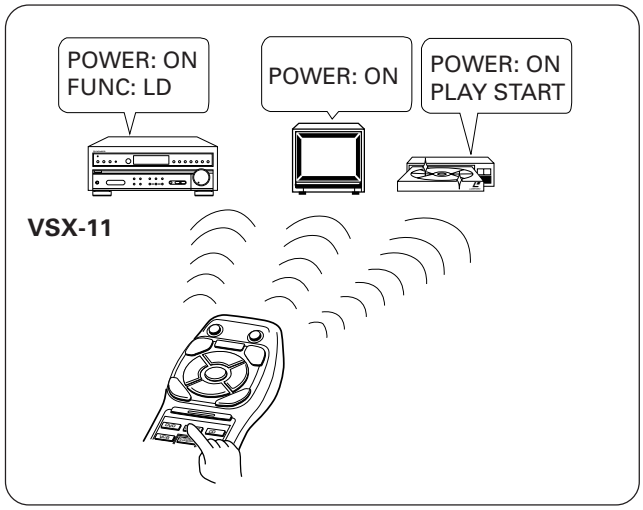
■ Control of other equipment

Your PIONEER products and other manufacturers' equipment (VCR, TV, LD player, CD player, etc.) can be controlled using this unit's remote control. (This requires the learning and setting of the remote control codes of other manufacturers' equipment.)



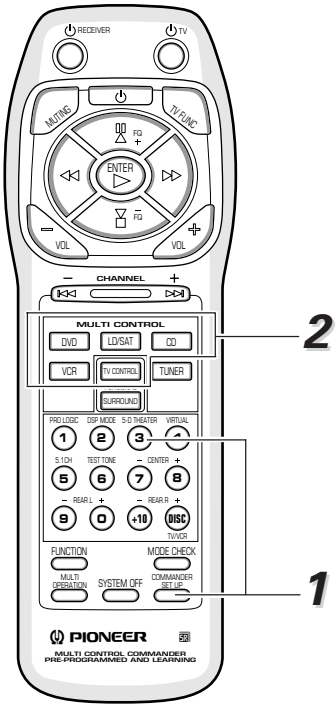
■ Multi Operation

Performing multi operation settings using this units remote control enables several devices to be operated easily.

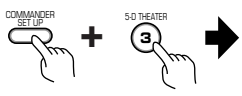


Operating other equipment using this unit's remote control (Preset mode)

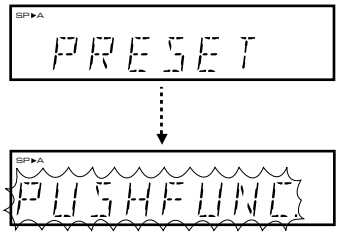
The remote control unit can be used to operate your PIONEER products and other manufacturers' audio/video equipment (VCR, TV, LD player, CD player, etc.).
Perform the following procedure to enable operation of other manufacturers' equipment.



1. **Set the preset mode.**

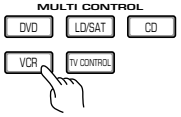


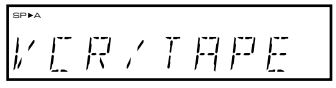
While pressing the COMMANDER SET UP button, press ③.



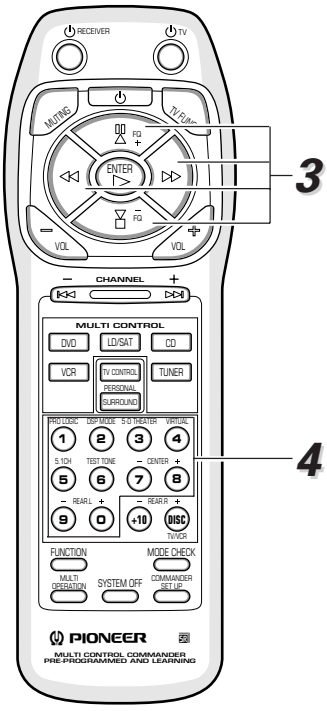
* Multi control section of the remote control unit will blink.

2. **Select the function to be set.**

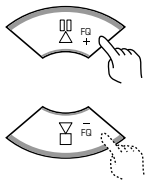




* The function button selected lights.

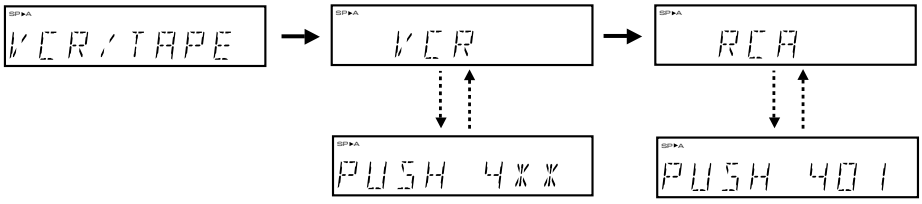


3. **While observing the display, find the manufacturer name and code.**



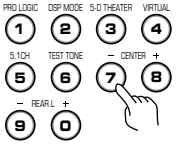
Each time the button is pressed, a different preset manufacturer name will be displayed. Display the name of the manufacturer whose equipment you are using and its code will be displayed automatically.

When the ▼ button is pressed, the manufacturer names are displayed in the reverse order.



4. **Point the remote control unit towards the device to be operated, and input the three-digit code number confirmed in step 3 .**

* Refer to the LIST OF MANUFACTURER CODES on page 46.

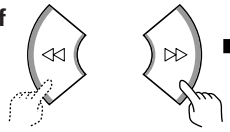


When a three-digit code number is input, the power ON/OFF signal will be output from the remote control unit. If the power of the device turns ON or OFF according to this signal, it indicates that the device has been set properly. If the power does not turn ON/OFF, input another code or use the learn function.

■ When there are several manufacturer codes for one manufacturer

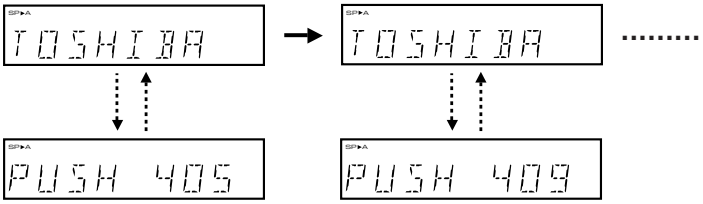
Some manufacturers use several remote control signals. In such cases, the device may not operate even if the manufacturer code displayed at the beginning is input. Perform the following steps, and look for another manufacturer code.

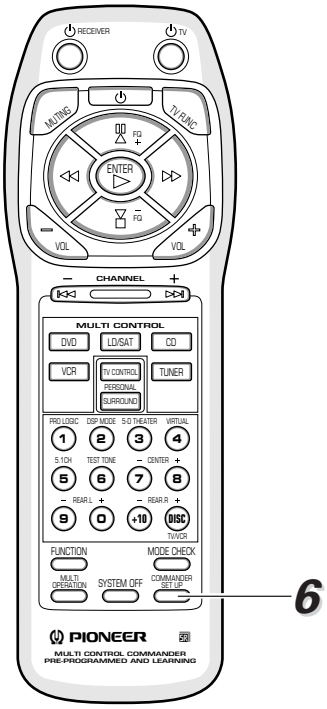
Look for another code of the manufacturer.



Each time these buttons are pressed, other preset codes of the manufacturer will be displayed.

Example: For TOSHIBA





5. **Repeat steps 2 and 4 and set other functions.**

6. **Exit the preset mode.**

Returns to normal operation.

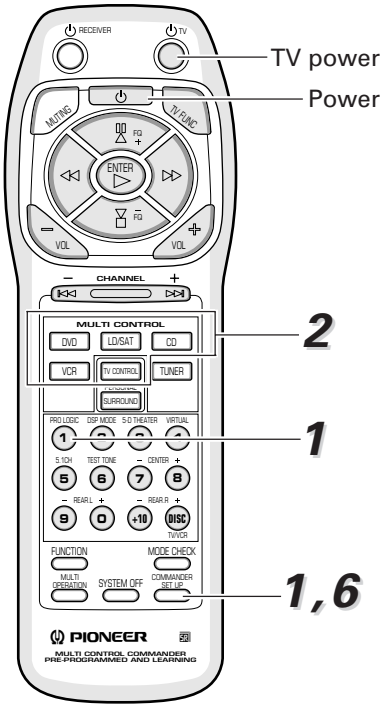
* Multi control section of the remote control unit will go off.

Memo

When operating a DVD LD player with the LD/SAT function, set the manufacturer code to "102" in the preset mode.

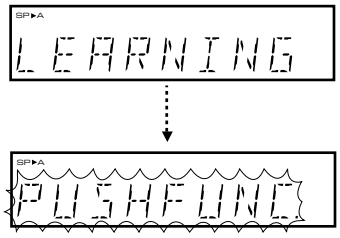
Memorizing other manufacturers' signals (Learning mode)

If your equipment does not set properly in the preset mode, set its remote control signals in this mode. Even if your equipment set properly in the preset mode, remote control signals of additional functions can be set. (those not shown in pages 24 to 27).



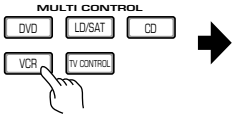
1. **Set the learning mode.**

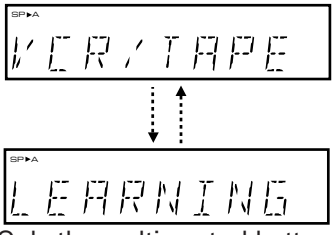
While pressing the COMMANDER SET UP button, press ①.



* Multi control section of the remote control unit will blink.

2. **Select the function to be learned.**



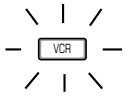


* Only the multi control button selected blinks.

3. **Select the button of the function to be learned using the remote control unit.**

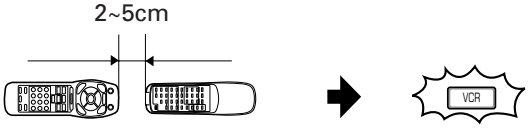
* Select from the gray buttons in the left figure of the remote control unit.

The remote control unit is ready to memorize the operation in the selected button.



* The multi control button of the remote control unit stops blinking and lights.

4. **Face the remote control units at each other. Press the button of the operation of the other manufacturers' device to be learned. (Press until the multi control button blinks.)**



* When learned, the multi control button of the remote control unit starts blinking.

5. **Repeat steps 2 to 4, and learn other required functions.**

6. **Exit the learning mode.**

Return to normal operations.

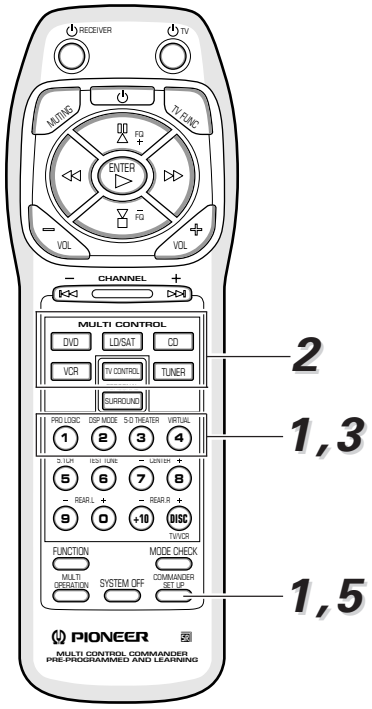
* All multi control buttons will go off.

Memo

- The TV POWER, TV FUNC, VOL – and + buttons can only be used for learning when TV CONTROL is selected.
- When TV CONTROL has been selected, memorize the same remote control signal into both TV power and Power.

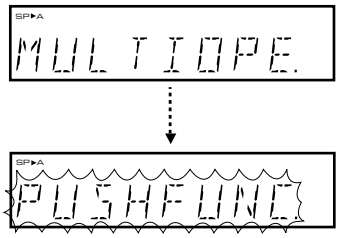
Turning ON/OFF the power of several devices (Multi Operation)

The power of devices connected to this unit can be turned ON/OFF with its remote control unit, and operated with the MULTI-OPERATION button of this remote control unit.



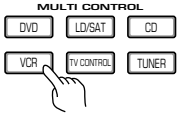
1. **Set the multi operation mode.**

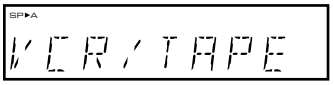
While pressing the COMMANDER SET UP button, press ②.



* Multi control section of the remote control unit blinks.

2. **Select the desired function.**





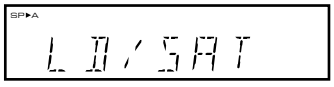
* Only the multi control button selected lights.

3. **Select the operation to be set from the table below, and press the corresponding number button.**

* Multi control section of the remote control unit blinks.

4. **To continue setting, repeat steps 2 and 3, and set each multi operation function.**

5. **Exit the multi operation mode.**



Return to normal operations.

* Multi control section will go off.

Memo

- For DVD and CD players, VCRs and cassette decks, the PLAY signals are output from the remote control unit.
- When the TV preset code is set to the DVD/TV function and the selected MULTI CONTROL function is a TV, a remote control signal is not output if Number button ③ is selected from the table below. To turn ON/OFF the TV POWER, set to ② or ④.

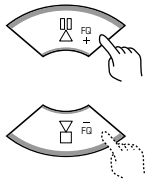
■ Multi Operation Table

Number Button	RECEIVER POWER	TV POWER	SELECTED DEVICE POWER	►
PRO LOGIC ①	YES →	NO →	NO →	YES
DSP MODE ②	YES →	NO →	YES →	YES
5-D THEATER ③	YES →	YES →	NO →	YES
VIRTUAL ④	YES →	YES →	YES →	YES

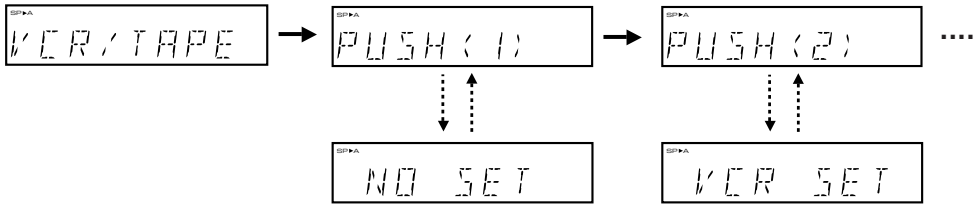
YES: Activated NO: Not activated

Memo

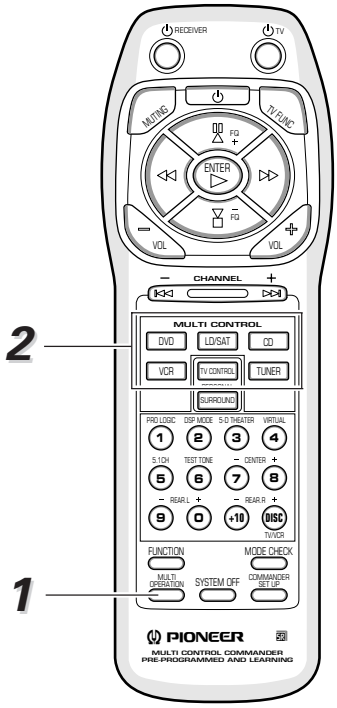
The multi operation can be set while watching the display. (Refer to step 3 on page 40.)



Each time the buttons are pressed, a multi operation is displayed.



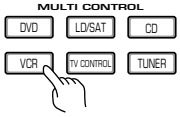
Performing Multi Operation



1. Enter the multi operation mode.

All multi control buttons of the remote control unit blink.

2. Select the desired function.



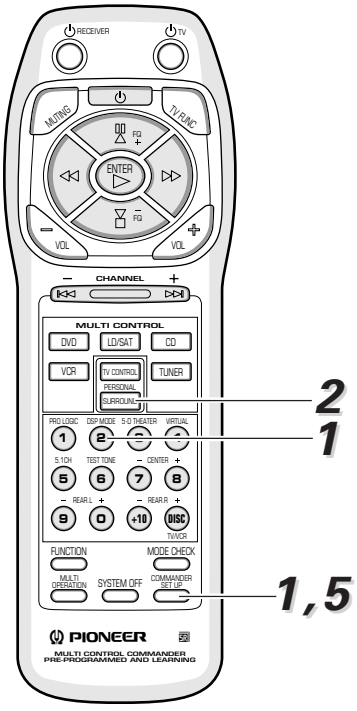
The power of this unit is turned ON, the function switches, and the power of the selected device turns ON/OFF according to the settings on page 40. (Some devices may start playback after this, such as a DVD player, CD player, LD player, VCR or cassette deck.)

Memo

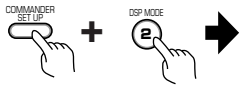
The power of this unit does not turn on when TV CONTROL is selected.

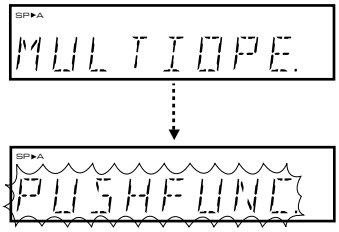
Multi Operation/Personal Mode

Up to 10 signals sent from the remote control unit (including learned signals) can be selected and set to personalize control of your equipment.
For example, you can turn on the power of the unit, TV and LD player and start LD playback.
The remote control signals of the shaded buttons in the following diagram can be set.



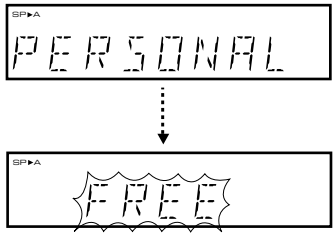
1. **Set the multi operation mode.**





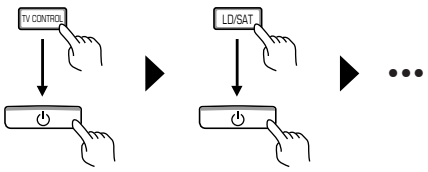
While pressing the COMMANDER SET UP button, press ②.

2. **Set the personal mode.**



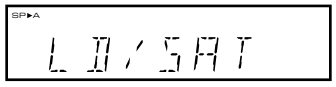
3. **Set the functions to be learned in order.**

Example:



4. **Repeat step 3, and memorize the remote control signals (up to 10).**

5. **End the multi operation (personal mode).**

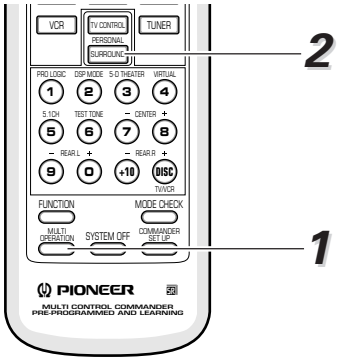


Return to normal operations.

Memo

When 10 signals are memorized, the setting mode automatically ends and the unit returns to normal operation.

Operating the Personal Mode

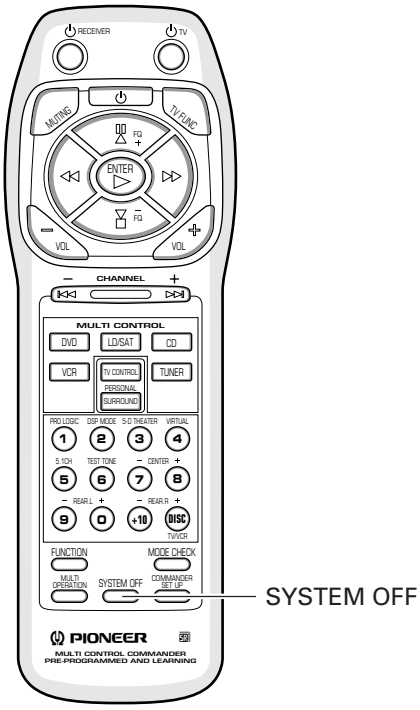


1. **Set the multi operation mode.**

2. **Set the multi operation mode (personal mode).**

Example: Turns ON the power of the unit, TV and LD player and starts LD playback.

Turning OFF the power of the system



Turn OFF the power of the system including this unit.

Equipment is will turn OFF according to the multi operation settings.

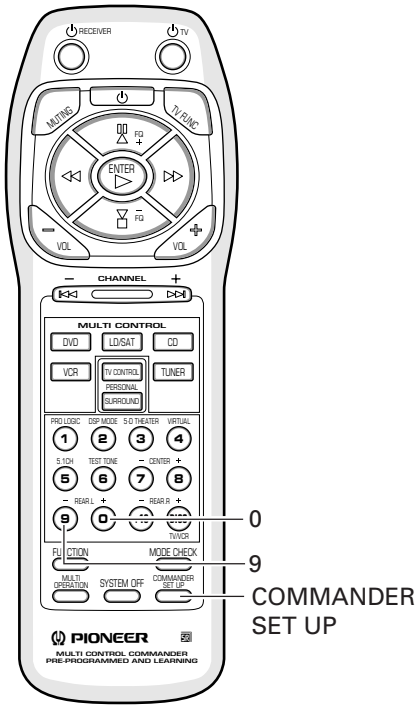
Example:
When you are using the remote control unit for VCR operation, and VCR/TAPE is set to "④" in the Multi Operation table on page 40, this unit, TV and VCR will turn OFF by this operation.

Memo

- In some devices that have been turned OFF, turning OFF the system will turn ON the power.
- All the PIONEER products will turn OFF.

Canceling remote control settings

Cancels settings that have been set or learned.



Cancel the set and learned settings.

All multi control buttons of the remote control will blink. After blinking three times, all settings will be canceled.

While pressing the COMMANDER SET UP button, press ⓪ for more than 3 seconds .

Cancel the learned settings.

Cancel the settings that have been learned only.

While pressing the COMMANDER SET UP button, press ⑨ for more than 3 seconds .

TROUBLESHOOTING

Incorrect operations are often mistaken for trouble and malfunctions. If you think that there is something wrong with this component, check the points below. Sometimes the trouble may lie in another component. Investigate the other components and electrical appliances being used. If the trouble cannot be rectified even after exercising the checks listed below, ask your nearest PIONEER authorized service center or your dealer to carry out repair work.

Symptom	Cause	Remedy
The power does not turn ON.	● The power plug is disconnected from the outlet. ● The cause may lie in the protection circuit.	● Insert into the wall outlet. ● Disconnect the power plug from the outlet, and insert again.
The unit does not work even when the buttons are pressed.	● Due to effects of static electricity when the air is dry.	● Disconnect the power plug from the outlet, and insert again.
No sound is output when a function is set.	● Not properly connected. ● Sound is muted. ● The volume is turned down. ● The TAPE 2 MONITOR is ON. ● The speaker switch is OFF. ● The SPEAKERS button has been used to selected speakers A and B (SP►AB), even though only one set of speakers is connected.	● Refer to pages 12 to 15 and connect again. ● Press the MUTING button on the remote control unit. ● Adjust MASTER VOLUME. ● Press the TAPE 2 MONITOR button. ● Press the SPEAKERS button to select the speakers. ● Set the SPEAKERS button to match the set of speakers connected.
No image is output when a function is set.	● Not properly connected. ● The input source is not properly selected.	● Refer to pages 12 and 13, and connect again. ● Press the correct button.
Considerable noise in radio broadcasts	● Not received at proper frequency. ● The antenna is not connected.	● Receive the correct frequency. ● Connect the antenna properly. (P.12 and 13)
	[FM broadcast reception] ● The FM antenna is not stretched out, and faces an inappropriate direction. ● Weak radio waves.	● Stretch out the antenna and secure it to a wall while selecting the direction and position with the best reception state. ● Change the FM antenna to an outdoor antenna of multiple elements. (P. 12)
	[AM broadcast reception] ● The AM antenna faces inappropriate direction. ● Weak radio waves. ● Affected by other equipment. (Fluorescent lamp, motor, etc.)	● Select the direction and position with the best reception state. ● Connect a 5 to 6 meter (15~18 feet) long vinyl-coated wire to the AM antenna terminal and extend the wire outdoors, if possible. (P. 12) ● Turn off the equipment which cause noise or move it away from the unit. ● Distance the antenna from the equipment which cause noise.
Broadcast stations cannot be selected automatically.	● Weak radio waves.	● Change the FM antenna to an outdoor antenna of multiple elements. (P. 12)

Symptom	Cause	Remedy
No sound from rear or center speakers.	● Settings are incorrect. ● Rear or Center level is turned down. ● The REAR or CENTER speaker is disconnected.	● Refer to pages 28 and 35, and set. ● Raise the level. ● Connect. (P. 12 and 13)
Cannot be remote controlled.	● The remote control unit batteries have worn out. ● Too great of a distance. Bad angle. ● There is an obstacle blocking signals in between. ● Strong light such as fluorescent light is shining onto the remote sensor of the main unit.	● Replace the batteries. (P. 7) ● Operate within 7m and 30 degrees from the left and right of main unit's remote sensor. ● Remove the obstacle or operate from somewhere else. ● Avoid direct exposure of the remote sensor to the light.

If the unit does not operate normally due to external effects such as static electricity, disconnect the power plug from the outlet and insert again to return to normal operating conditions.

LIST OF MANUFACTURER CODES

Device	Manufacturer	Manufacturer Code
DVD	TOSHIBA	001
	SONY	002
	PANASONIC	003
	JVC	004
	SAMSUNG	005
	PIONEER	000
LD	SONY	101
	PANASONIC	105,106
	KENWOOD	103
	PHILIPS	104
	MITSUBISHI	100
	RCA	107
	PIONEER	100
		102 (DVD LD player)
SAT	RCA	201,203
	SONY	202
	PIONEER	200
VCR	RCA	401,406,408,414,405,413,411
		415
	ZENITH	403,404,417
	MAGNAVOX	414,408,426,403
	FISHER	410,426,412,427,425,420
	PANASONIC	408,432,433
	TOSHIBA	405,409,426
	JVC	428,430,429,408,414,431,407
	HITACHI	408,401,406,436,434
	SONY	416,417,404,408
	MITSUBISHI	409,420,421,422,423,424,408
		407
	SANYO	410,412,425,435
	SHARP	402,418,419
	GOLDSTAR	411,409
	OPTIMUS	408,432,433,402,418,419
	GRANDIENTE	452
	PIONEER	400
TAPE	SONY	801,806
	TECHNICS	803
	KENWOOD	804,807
	TEAC	805
	DENON	810
	ONKYO	809,808
	YAMAHA	811,812
	JVC	802
	FISHER	813
	OPTIMUS	800
	PIONEER	800

Device	Manufacturer	Manufacturer Code
CD	SONY	301,316,317,318
	TECHNICS	304,326
	KENWOOD	310,321,311
	DENON	309
	RCA	302,319,313
	PHILIPS	312,322
	YAMAHA	315,314,328
	JVC	303
	TEAC	305,306,327,324,325
	ONKYO	320,308,307
	MARANTZ	323,312,324
	SANYO	313
	OPTIMUS	300
	PIONEER	300
TV	RCA	601,610,615,616,617,618
	ZENITH	603,620
	MAGNAVOX	607,610,603,612,629
	GE	601,608,607,610,617,602,628
		618
	PANASONIC	608,622,607
	SONY	604
	TOSHIBA	605,602,626,621
	MITSUBISHI	609,610,602,621
	HITACHI	606,610,624,625,618
	JVC	613,623
	SHARP	602,619,627
	SANYO	621,614
	PHILIPS	607
	GOLDSTAR	610,623,621,602
	RADIO SHACK	610,623,621,602
	GRANDIENTE	635
	PIONEER	600
CATV	JERROLD	711,701,702,712,704,713,703
		714,716,715
	S.A.	705,706,708,709
	ZENITH	707,717,710
	PIONEER	700

SPECIFICATIONS

Amplifier Section

Continuous average power output of 100 watts* per channel, min., at 8 ohms, from 20 Hz to 20,000 Hz with no more than 0.09 % total harmonic distortion (front).**

Continuous Power Output
- Front ..... 100 W + 100 W (1 kHz, 0.8 %, 8 Ω)
- Center ..... 100 W (1 kHz, 0.8 %, 8 Ω)
- Rear ..... 100 W + 100 W (1 kHz, 0.8 %, 8 Ω)

Input (Sensitivity/Impedance)
- PHONO MM ..... 2.8 mV/47 kΩ
- LD/SAT, CD, VCR/TAPE 1, TAPE 2, DVD/TV ..... 200 mV/47 kΩ

Phono Overload Level (T.H.D. 0.1 %, 1kHz)
- PHONO MM ..... 100 mV

Frequency Response
- PHONO MM ..... 20 Hz to 20,000 Hz ± 0.3 dB
- LD/SAT, CD, VCR/TAPE 1, TAPE 2, DVD/TV ..... 5 Hz to 100,000 Hz $^{+0}_{-3}$dB

Output (Level/Impedance)
- VCR/TAPE 1 REC, TAPE 2 REC ..... 200 mV/2.2 kΩ

Tone Control
- BASS ..... ± 8 dB (100 Hz)
- TREBLE ..... ± 8 dB (10 kHz)
- LOUDNESS ..... +7 dB (100 Hz)/+6 dB(10 kHz)

Signal-to-Noise Ratio (IHF, short circuited, A network)
- PHONO MM ..... 72 dB
- LD/SAT, CD, VCR/TAPE 1, TAPE 2, DVD/TV ..... 96 dB

Signal-to-Noise Ratio [EIA, at 1 W (1kHz)]
- PHONO MM ..... 75 dB
- LD/SAT, CD, VCR/TAPE 1, TAPE 2, DVD/TV ..... 79 dB

* *Measured pursuant to the Federal Trade Commission's Trade Regulation rule on Power Output Claims for Amplifiers.*

** *Measured by Audio Spectrum Analyzer.*

VIDEO Section

Input (Sensitivity/Impedance)
- LD/SAT, VCR, DVD/TV ..... 1 Vp-p/75 Ω

Output (Level/Impedance)
- VCR REC, MONITOR TV ..... 1 Vp-p/75 Ω

Frequency Response
- LD/SAT, VCR, DVD/TV → MONITOR ..... 5 Hz to 7 MHz $^{+0}_{-3}$dB

Signal-to-Noise Ratio ..... 65 dB

Cross Talk ..... 55 dB

FM Tuner Section

Frequency Range ..... 87.5 MHz to 108 MHz

Usable Sensitivity ..... Mono: 13.2 dBf, IHF (1.3 µV/75 Ω)

50 dB Quieting Sensitivity ..... Mono: 20.2 dBf
Stereo: 38.6 dBf

Signal-to-Noise Ratio ..... Mono: 73 dB (at 85 dBf)
Stereo: 70 dB (at 85 dBf)

Distortion ..... Stereo: 0.5 % (1kHz)

Alternate Channel Selectivity ..... 60 dB (400 kHz)

Stereo Separation ..... 40 dB (1 kHz)

Frequency Response ..... 30 Hz to 15 kHz (± 1) dB

Antenna Input ..... 75 Ω unbalanced

AM Tuner Section

Frequency Range ..... 530 kHz to 1,700 kHz (10 kHz step)

Sensitivity (IHF, Loop antenna) ..... 350 µV/m

Selectivity ..... 25 dB

Signal-to-Noise Ratio ..... 50 dB

Antenna ..... Loop antenna

Miscellaneous

Power Requirements ..... AC 120 V, 60 Hz

Power Consumption ..... 280 W, 410 VA

In Standby Condition ..... 2.5 W

AC Outlet
- SWITCHED ..... 100 W (0.8 A) MAX

Dimensions ..... 420 (W) × 158 (H) × 383 (D) mm
16-9/16 (W) × 6-1/4 (H) × 15-1/16 (D) in

Weight (without package) ..... 9.2 kg (20 lb 5 oz)

Furnished Parts

FM Antenna 1

AM Loop Antenna 1

Dry Cell Batteries (AA/LR6) 2

Remote Control Unit 1

Operating Instructions 1

Warranty card 1

NOTE:

Specifications and the design are subject to possible modifications without notice, due to improvements.

Should this product require service in the U.S.A. and you wish to locate the nearest Pioneer Authorized Independent Service Company, or if you wish to purchase replacement parts, operating instructions, service manuals, or accessories, please call the number shown below.

1–800–421–1404

Please do not ship your product to Pioneer without first calling the Customer Service Department at the above listed number for assistance.

PIONEER ELECTRONICS SERVICE, INC.
CUSTOMER SUPPORT DIVISION
P.O. BOX 1760, LONG BEACH,
CA 90801-1760, U.S.A.

For warranty information please see the Limited Warranty sheet included with your product.

Should this product require service in Canada, please contact a Pioneer authorized dealer in Canada to locate the nearest Pioneer Authorized Service Company.
Alternatively, please contact or ship your defective product freight prepaid to one of the following Factory Service locations closest to you:

Pioneer Electronics of Canada, Inc.

Factory Service East
300 Allstate Parkway
Markham, ON L3R 0P2
(905) 479-4411

Factory Service West
13911 Bridgeport Road
Richmond, BC V6V 1J6
(604) 278-1014

For warranty information please see the Limited Warranty sheet included with your product.

Dear Customer:

Selecting fine audio equipment such as the unit you've just purchased is only the start of your musical enjoyment. Now it's time to consider how you can maximize the fun and excitement your equipment offers. This manufacturer and the Electronic Industries Association's Consumer Electronics Group want you to get the most out of your equipment by playing it at a safe level. One that lets the sound come through loud and clear without annoying blaring or distortion-and, most importantly, without affecting your sensitive hearing.

Sound can be deceiving. Over time your hearing "comfort level" adapts to higher volumes of sound. So what sounds "normal" can actually be loud and harmful to your hearing. Guard against this by setting your equipment at a safe level BEFORE your hearing adapts.

To establish a safe level:
- Start your volume control at a low setting.
- Slowly increase the sound until you can hear it comfortably and clearly, and without distortion.

Once you have established a comfortable sound level:
- Set the dial and leave it there.

Taking a minute to do this now will help to prevent hearing damage or loss in the future. After all, we want you listening for a lifetime.

We Want You Listening For A Lifetime

Used wisely, your new sound equipment will provide a lifetime o fun and enjoyment. Since hearing damage from loud noise is often undetectable until it is too late, this manufacturer and the Electronic Industries Association's Consumer Electronics Group recommend you avoid prolonged exposure to excessive noise. This list of sound levels is included for your protection.

Decibel Level	Example
30	Quiet library, soft whispers
40	Living room, refrigerator, bedroom away from traffic
50	Light traffic, normal conversation, quiet office
60	Air conditioner at 20 feet, sewing machine
70	Vacuum cleaner, hair dryer, noisy restaurant
80	Average city traffic, garbage disposals, alarm clock at two feet.
THE FOLLOWING NOISES CAN BE DANGEROUS UNDER CONSTANT EXPOSURE	
90	Subway, motorcycle, truck traffic, lawn mower
100	Garbage truck, chain saw, pneumatic drill
120	Rock band concert in front of speakers, thunderclap
140	Gunshot blast, jet plane
180	Rocket launching pad

Information courtesy of the Deafness Research Foundation.

MAINTENANCE OF EXTERNAL SURFACES

- Use a polishing cloth or dry cloth to wipe off dust and dirt.
- When the surfaces are dirty, wipe with a soft cloth dipped in some neutral cleanser diluted five or six times with water, and wrung out well, and then wipe again with a dry cloth. Do not use furniture wax or cleaners.
- Never use thinners, benzine, insecticide sprays or other chemicals on or near this unit, since these will corrode the surfaces.

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